

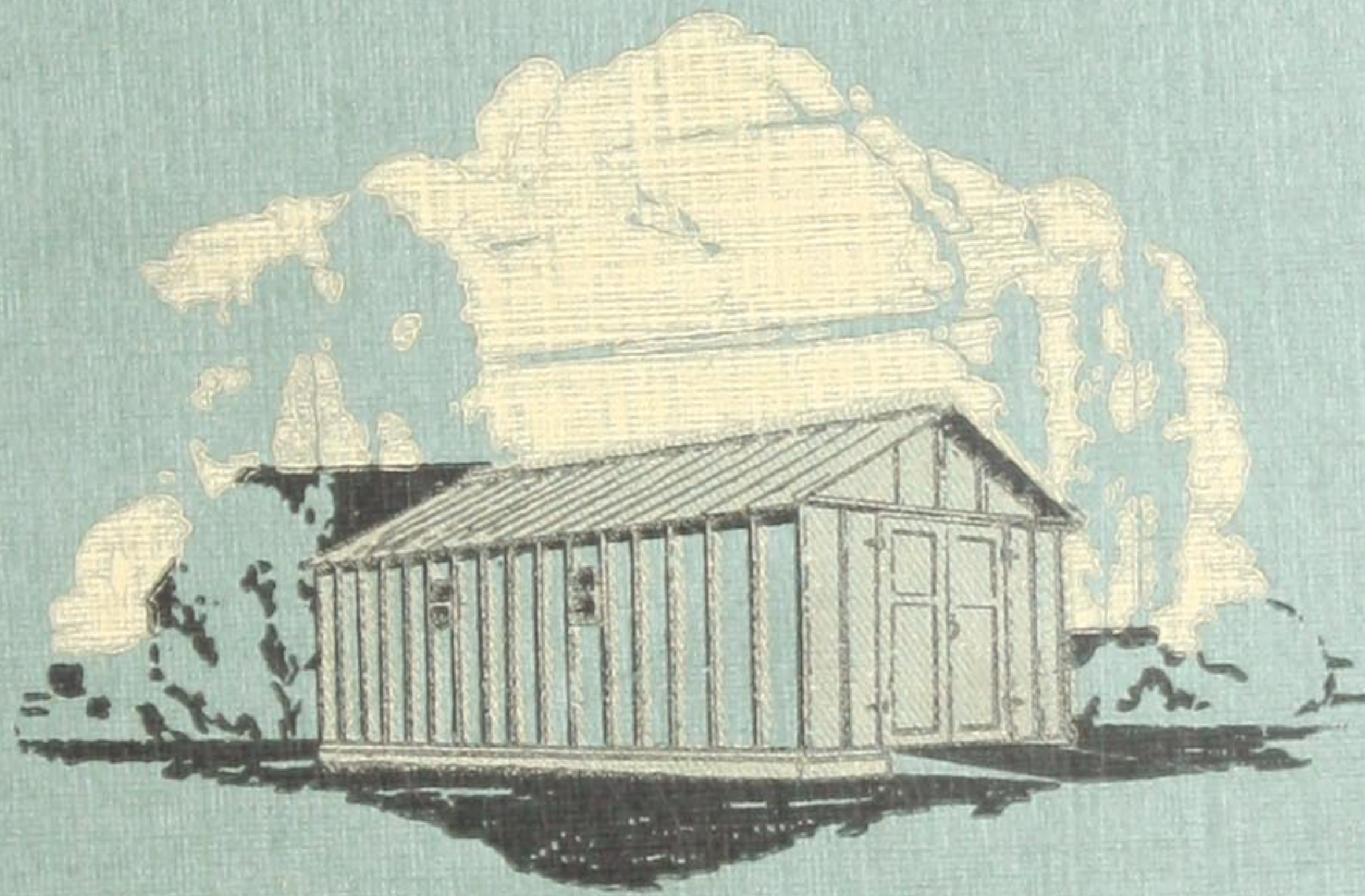
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SWARTWOUT METAL BUILDINGS

With the Interlocking joints



THE OHIO BODY & BLOWER CO.
CLEVELAND, OHIO, U.S.A.

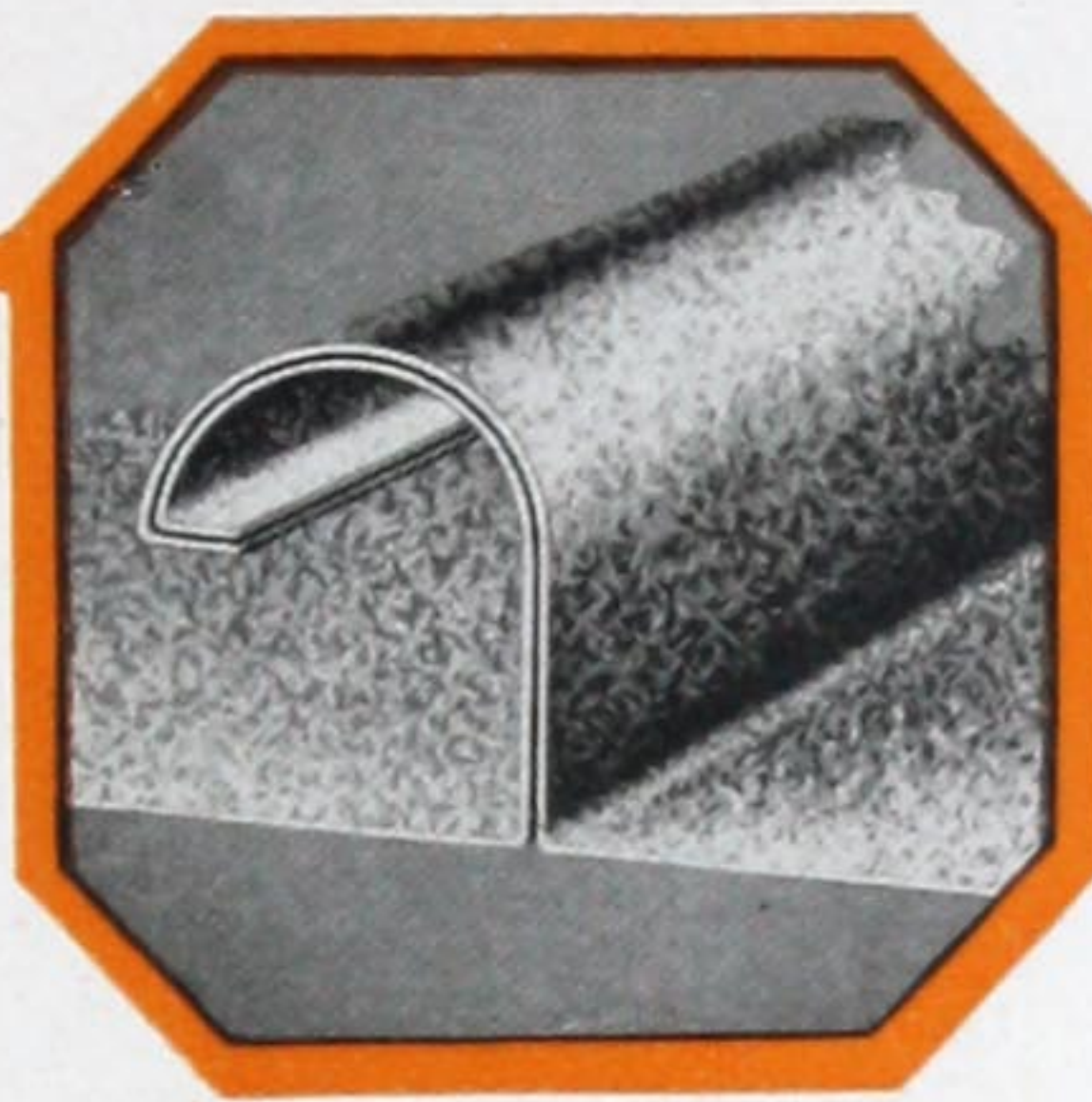
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SWARTWOUT METAL BUILDINGS

With the Interlocking joints



THE OHIO BODY & BLOWER CO.
CLEVELAND, OHIO

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The illustration above shows one of the many uses of Swartwout Metal Buildings. This warehouse for one of the largest industrial corporations in the country, was shipped from stock and speedily erected to meet an overnight demand for a building.

Satisfying a Need

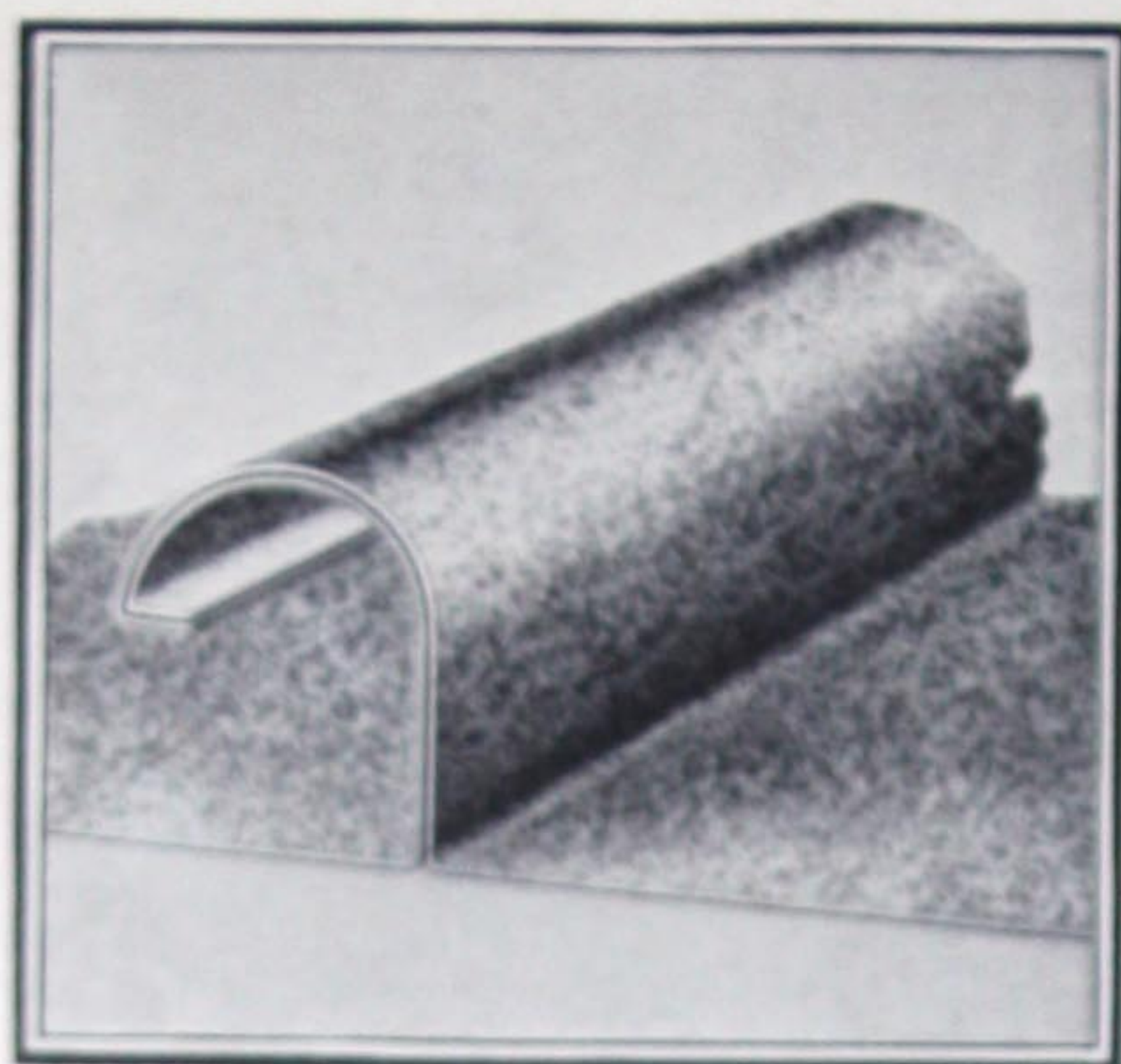
THERE has long been a great need for a certain type of small building that is best described as strong and durable, simple and light in construction, easy to erect, portable, weather-proof, fire-proof, rust-resisting, inexpensive, adaptable to any use and capable of being furnished in any size by virtue of being produced in standard sections.

It is one thing to describe the type of building needed; but quite another thing to design buildings that meet all of the requirements. Yet if the need is great enough, in any instance of this kind, the exact article wanted will at length be placed upon the market. And that is just what has happened in the case of Swartwout Metal Buildings.

Swartwout Metal Buildings represent a genuinely new idea in building construction—so new that a patent has been granted on the Swartwout method of interlocking joint construction. This one patented idea was the key feature which made possible a design that meets each and every one of the requirements as enumerated in the first paragraph above.

The result is the placing upon the market, at a price within the reach of all (individual or corporation), a new type of metal building, the Swartwout, capable of universal use for the home, farm, contractor, retail store, industrial plant, mine and oil well and for the railroad and interurban.

The purpose of this book is to explain the Swartwout idea, to show its adaptation for different building uses and to give a clear conception of its easy method of erection.



Swartwout— the perfect metal building

MANY good ideas are known for a long time before any real development is possible. They wait in obscurity, sometimes for years, until some simple additional idea makes them practical. For instance, when Edison had invented the talking machine he was at a loss to find a suitable material for the cylinders or records until the idea of using soap occurred to him. Then he was able to produce a commercially successful article.

The idea of small metal buildings is not a new one, but it has waited a long time for the Swartwout idea in design to eliminate the objectionable features of metal buildings themselves and to bring them to perfection.

The basic idea of Swartwout is a patented interlocking construction of the joints that gives strength, light weight, portability, ease of erection and good appearance.

This Swartwout interlocking joint is a very simple thing but no one had ever thought of it before. By a slight curling of the edges of each section of metal, you hook one section into another (as will be shown and explained in detail farther on in this book) so that you immediately have a strong, weather-proof joint. It is so simple that a pair of pliers, a screw-driver, and a hammer are the only tools needed to erect a Swartwout Building.

The various metal pieces used in the walls and roof are so shaped as to form a weather-proof joint and to form at the same time a frame or superstructure of great strength. In other words, no material is used to join any two pieces of metal—they form their own joint and they form their own frame.

In order to have a clear general idea of what a Swartwout metal building is like, it is only necessary to consider how the Swartwout interlocking joint effects such desirable qualities as lightness, quickness of erection, strength, good appearance, etc. Let us do this before we consider its adaptability for different purposes.

Lightness

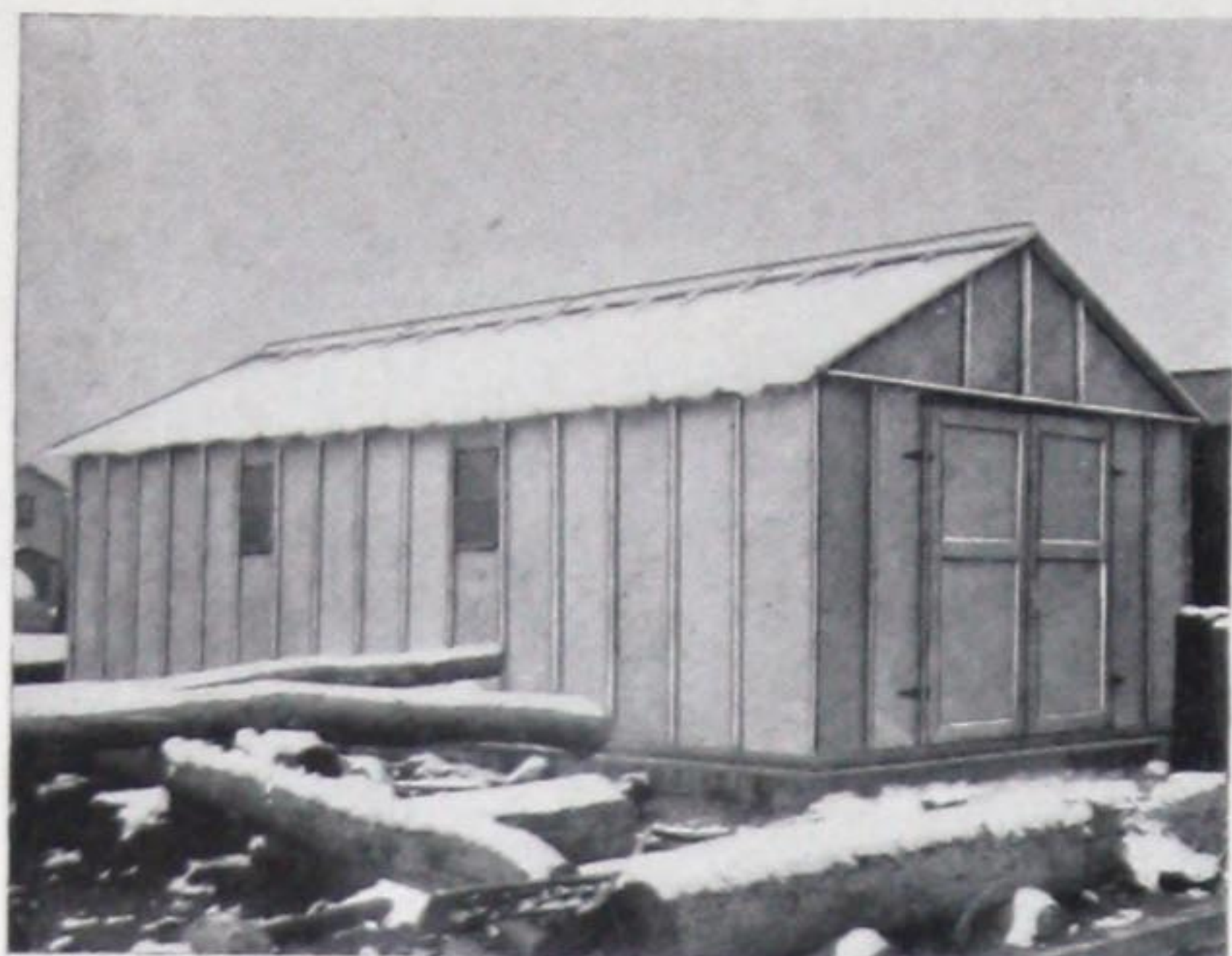
EACH metal section locks into the section on either side of it, the joints being so designed, as already stated, that the sections require no frame for support. Hence a great weight of structural iron and bolts that usually must be employed is entirely eliminated. The weight of the entire building is less than the weight of any other metal building of the same gauge of metal. The weight of no individual section, excepting the doors and ridge bar is over twenty-five pounds.

Simplicity of construction— quickness of erection

THE SWARTWOUT interlocking joint, in addition to eliminating a heavy frame of structural iron, makes it unnecessary for adjoining sections to be fastened together by bolts. They simply lock themselves together. Each wall section has one bolt at the sill and one at the eaves. Each roof section has two bolts at the eaves and two at the ridge. With the exception of the bolts for hanging the doors, these are all that are used. All bolt holes are oblong. One man and a helper can easily erect an ordinary Swartwout building in one day, and can, if the occasion requires, take it down and set it up somewhere else just as easily. Over short distances, the building may be moved bodily without being taken apart.

Windows and doors can be located in the walls to suit the peculiar requirements of any condition.





Strength and rigidity

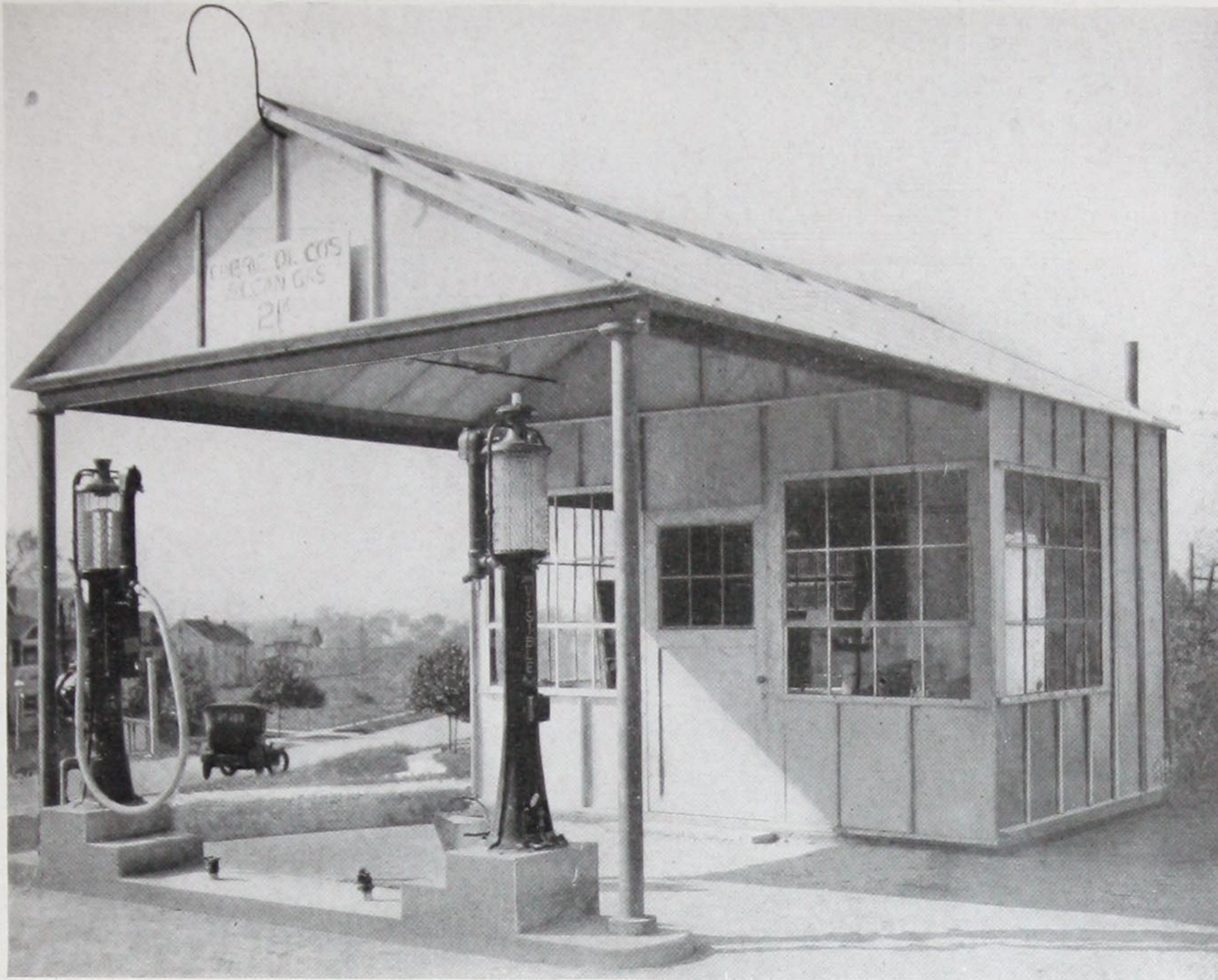
A SWARTWOUT building is as firm and enduring as any permanent building of its size. This again is due to the Swartwout interlocking joint. In this joint lies strength to carry any snowload. The strength is there without the weight, and it is far more durable than corrugated sheets on a structural iron frame.

Well designed for good appearance

SO FAR as appearance is concerned the Swartwout joint lends architectural beauty to the design. The joints divide the outside of the building into neat panels, quite different from the flat uninteresting surface of corrugated sheets. On the inside you have a perfectly smooth wall with no structural iron or projecting bolts to eat up space or tear the clothing.

Every feature that might detract from good appearance has been avoided. The eaves and windows are well designed. The proportions are good. The doors are well hung and fitted with Yale type locks. The outside may be painted attractively and the inside papered or even lined with wall board.





Weatherproof, fireproof

THE MOMENT you lock two sections together you have an absolutely weather-proof joint. The elasticity of the metal binds them together. They are water tight. You can't get through them with a fire hose. The eaves extend across the gables as well as over the side walls, so that no water can get in over the doors. Being made entirely of metal, Swartwout buildings are absolutely fire-proof.

Durable, rust-resisting

THE GREATEST inherent defect of metal buildings has been overcome in the Swartwout Buildings. Only rust-resisting metal of highest quality is used in Swartwout buildings. This special metal defies rust and depreciation.

Old style metal buildings rusted out so quickly that they did not last as long as wood. But Swartwout buildings are rust-resisting. Long after others have been sent to the junk heap, Swartwouts will still be serving their original purpose, in excellent condition. No paint is required, and none should be applied until the building has been weathered for a year.

This feature is one of the most important advantages of Swartwout buildings and one that has a direct bearing on the question of economy. They last longer. There's your answer.

Swartwout metal buildings for manufacturers

IN CONNECTION with every manufacturing plant, small buildings for various purposes are one of the requirements. Swartwout Metal Buildings lend themselves readily to a variety of such purposes because they are portable, strong, quickly erected, and being made of special metal they are rust-resisting and wear longer.

The photographs on the next page illustrate some of these uses, while below is given a partial list. It is probable that in addition to these every manufacturer has some special use for a Swartwout that perhaps few others would need. No doubt the uses mentioned will suggest others.

WATCHMAN'S GATE HOUSE

HOSE REEL AND FIRE HYDRANT HOUSE

TIMEKEEPER'S OFFICE

PAYMASTER'S OFFICE

SUPERINTENDENT'S OFFICE

LIGHTING PLANT

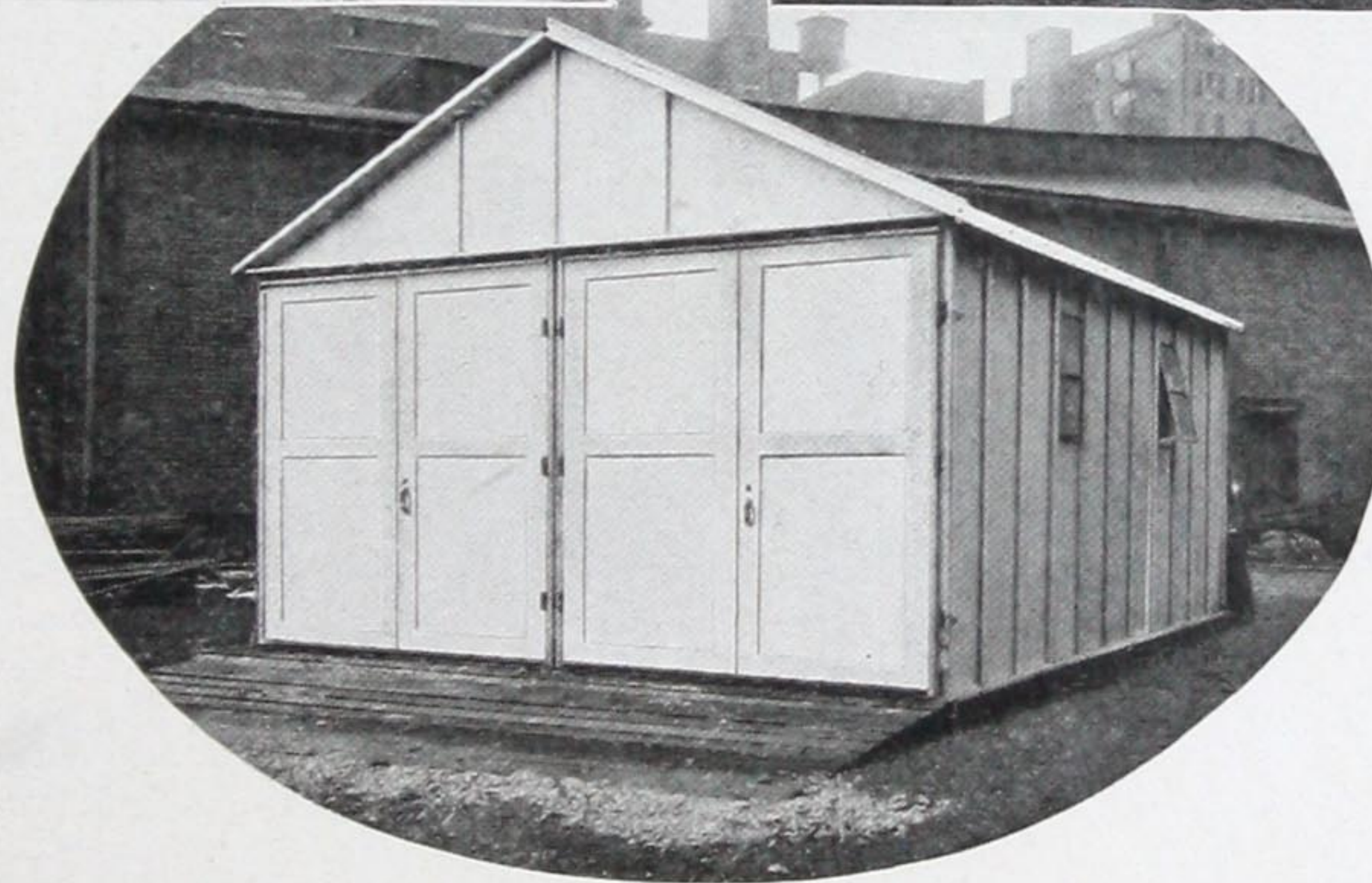
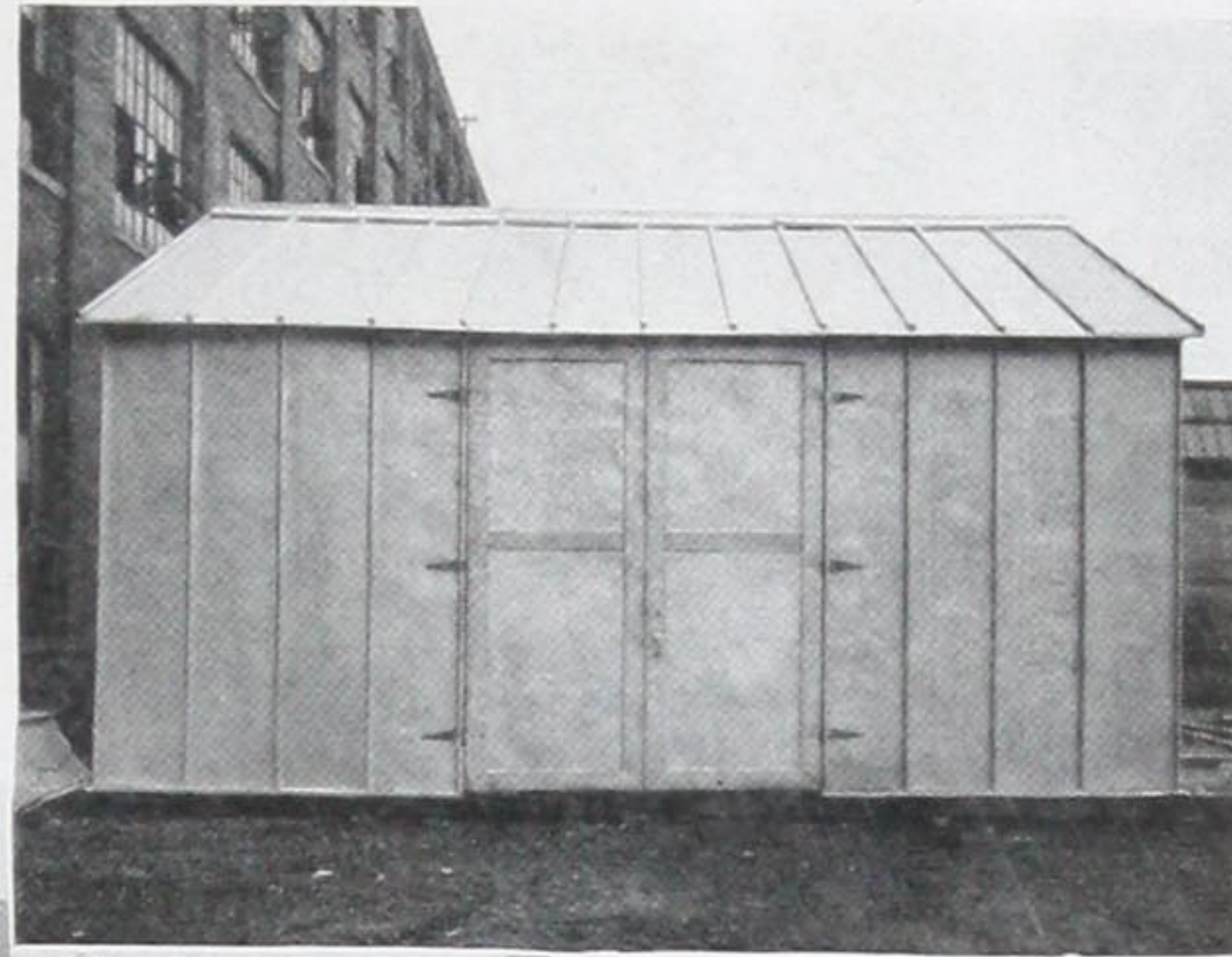
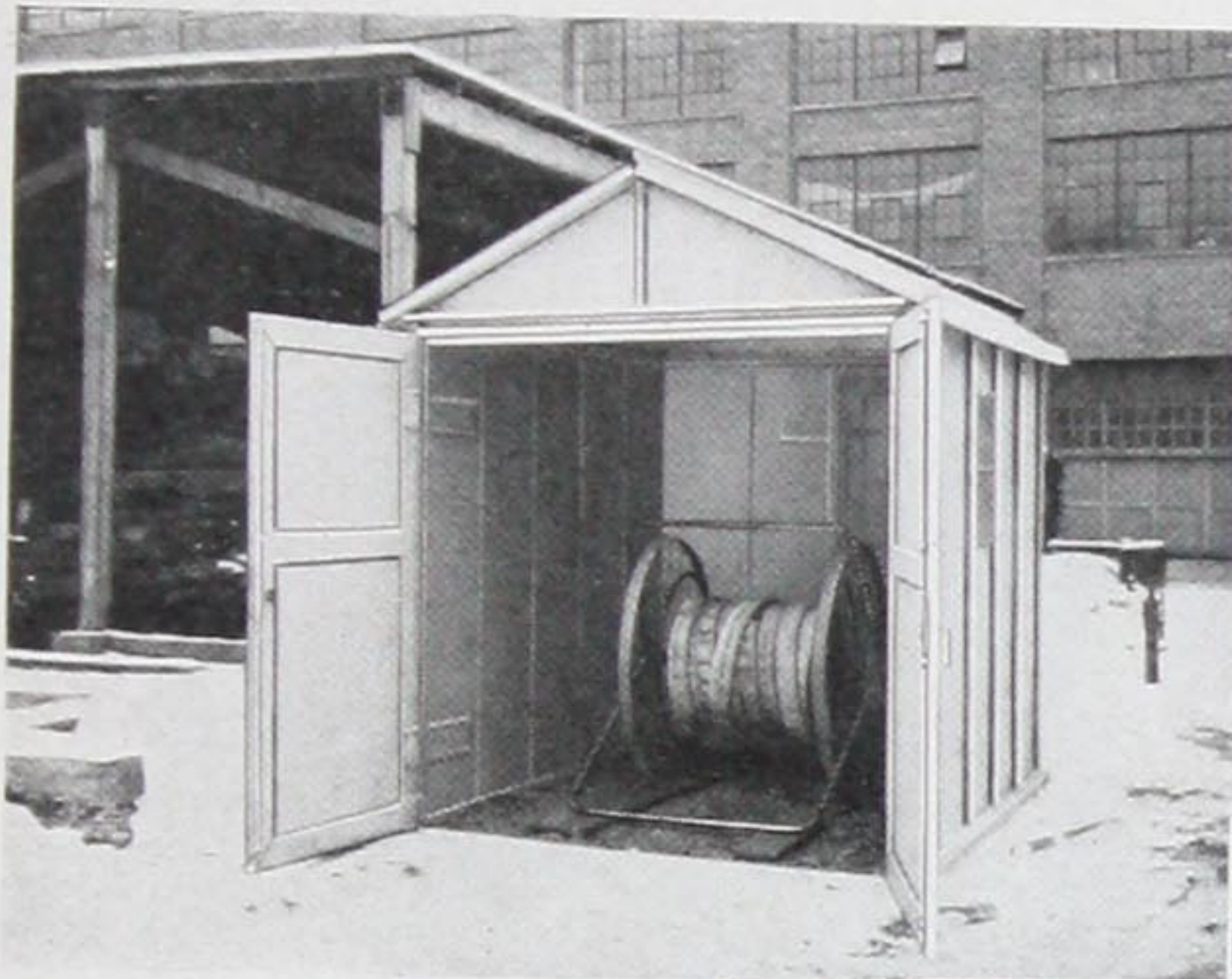
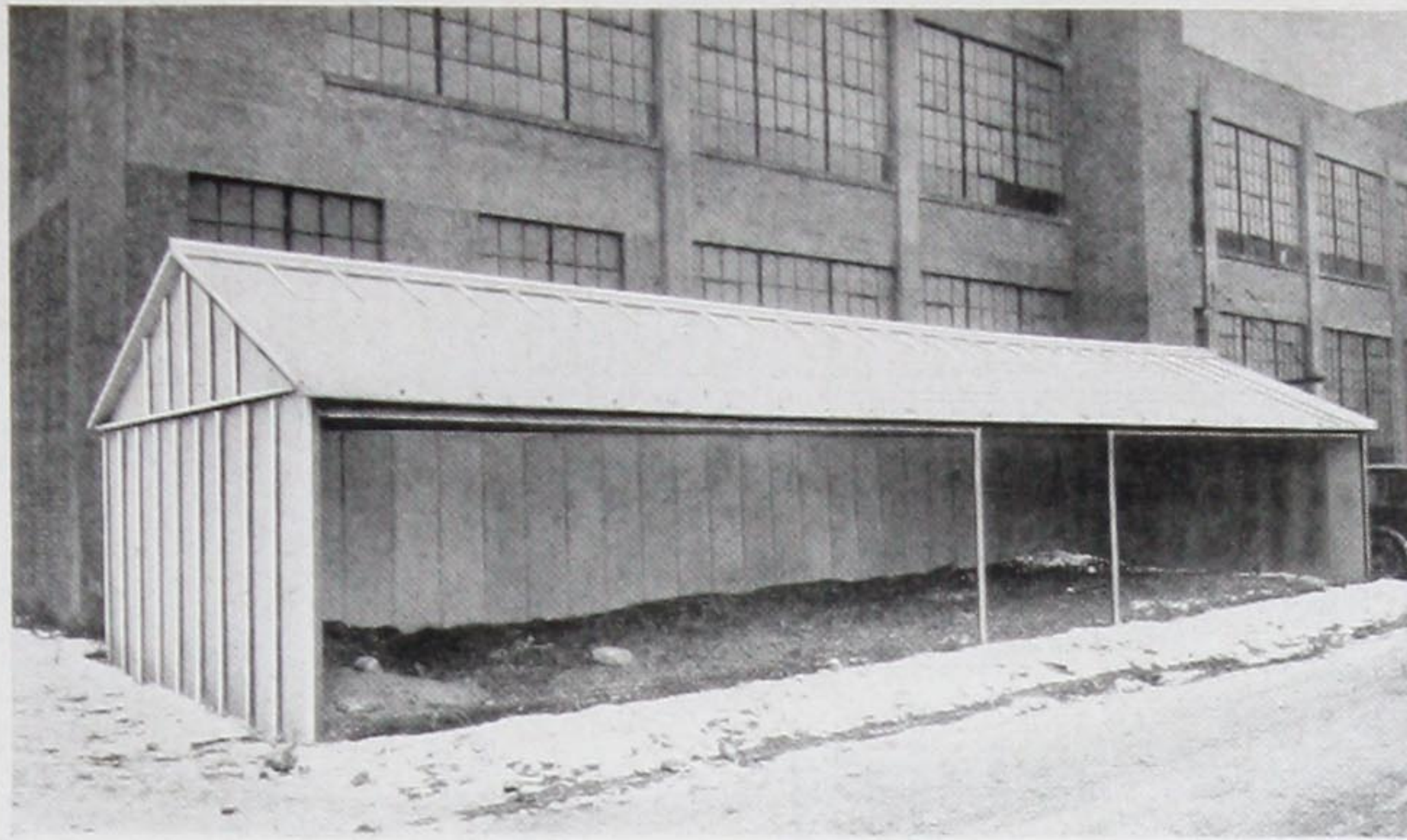
ELECTRIC TRANSFORMER HOUSE

OPEN SHEDS

WAREHOUSE

MULTIPLE GARAGES

PATTERN STORAGE



Warehouses

AS SWARTWOUT metal buildings are absolutely weather-proof, they make excellent, safe warehouses for practically any kind of merchandise. In addition, being fire-proof, they offer protection from fire, and if necessary may be ventilated with Swartwout Rotary Ball Bearing ventilators.

Sometimes unusually large amounts of raw material or goods are purchased to take advantage of favorable market conditions or to insure a future supply when a period of scarcity threatens. Then the quickness with which a Swartwout can be erected recommends it to help solve emergency warehousing problems.

A Swartwout may be considered an emergency or temporary affair in that it is portable and may be taken down as easily as it is put up. On the other hand, it is so strong, durable and



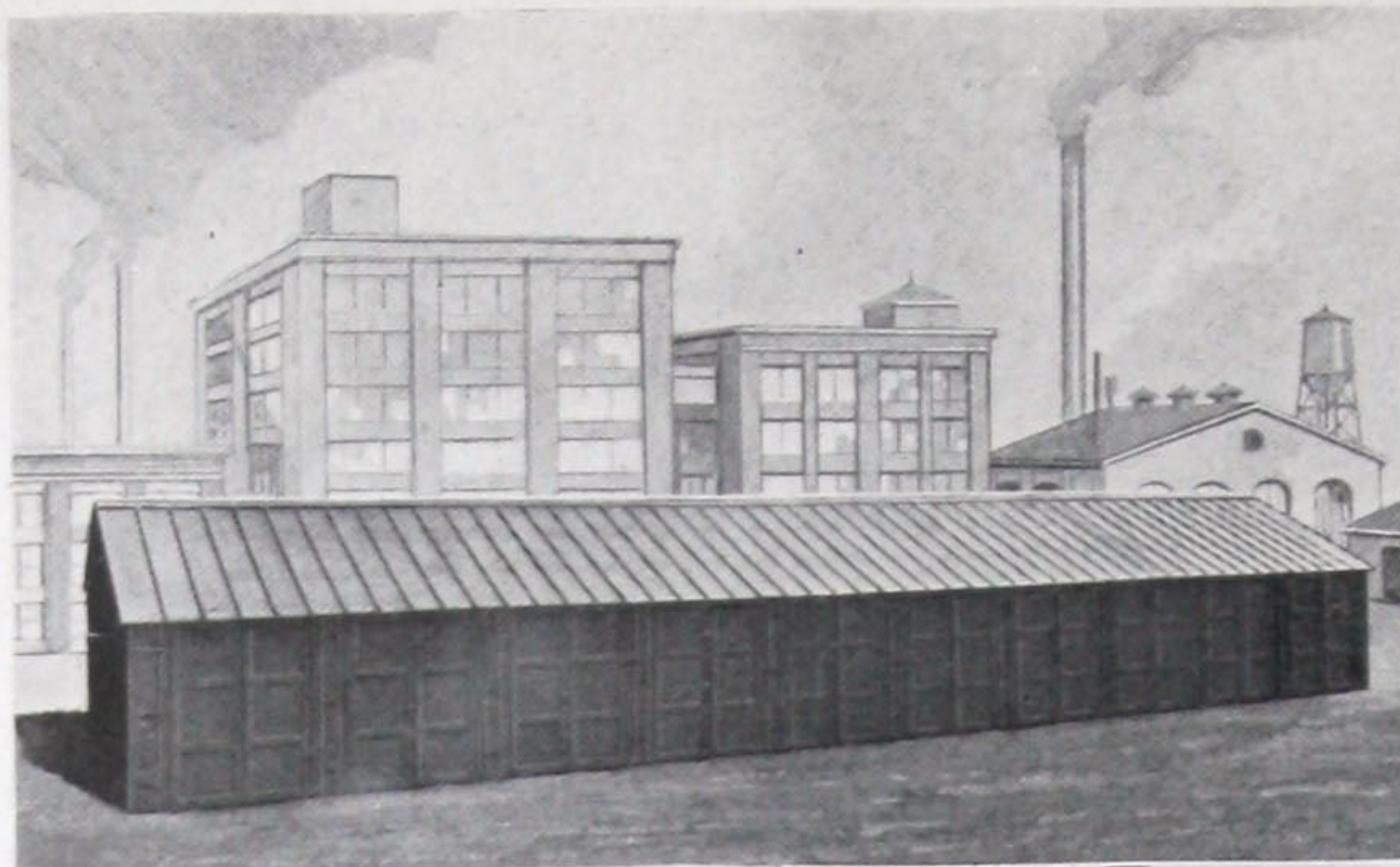


rust-resisting, that it may also be thought of as a permanent structure that will last for years.

For either temporary or permanent warehousing, it offers at a low price all of the requirements that a warehouse should have, whether it is for a farmer, retail store, manufacturer, oil company or railroad.

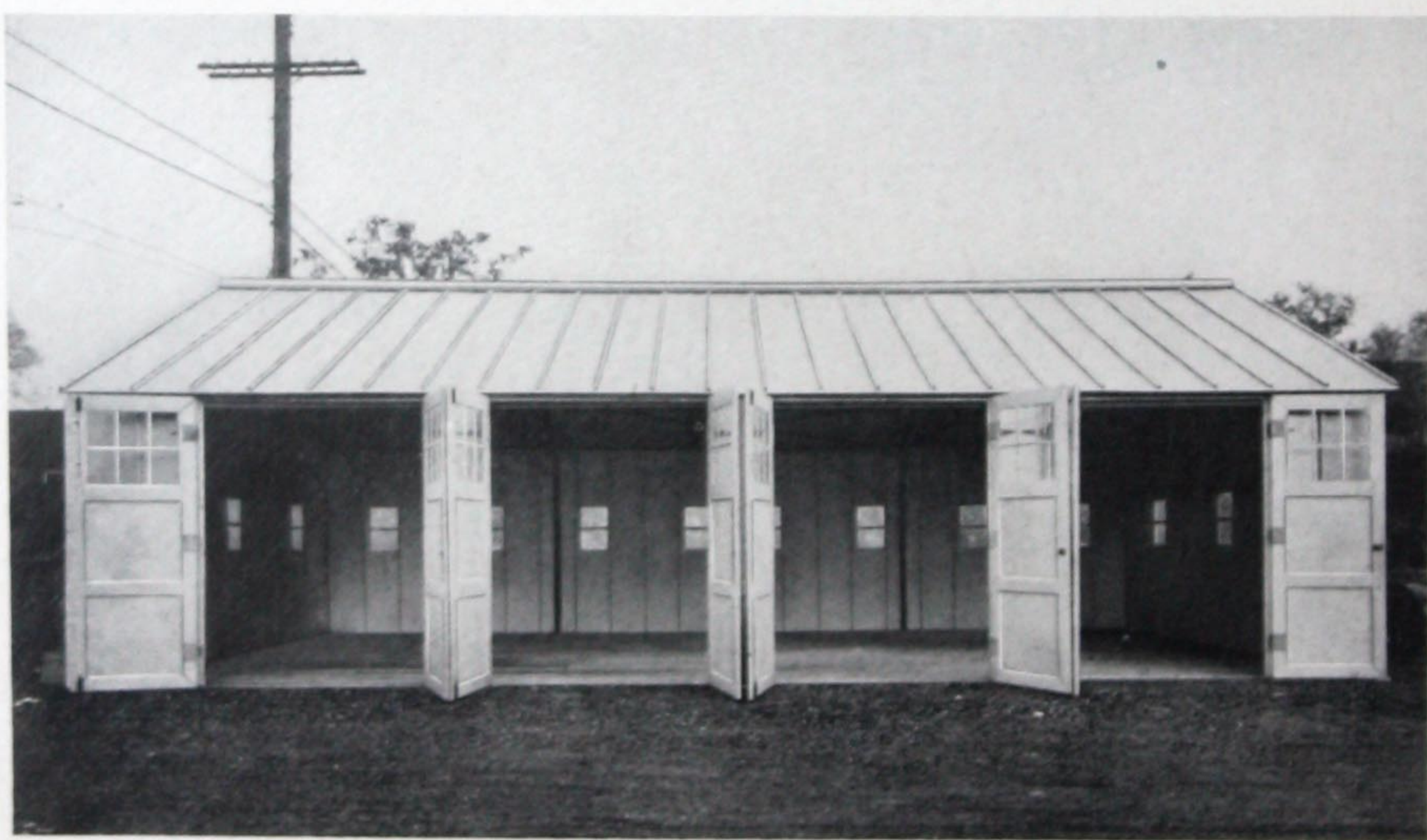
We are showing here a few photographs of Swartwout warehouses. One advantage of them is that they may be made any size.

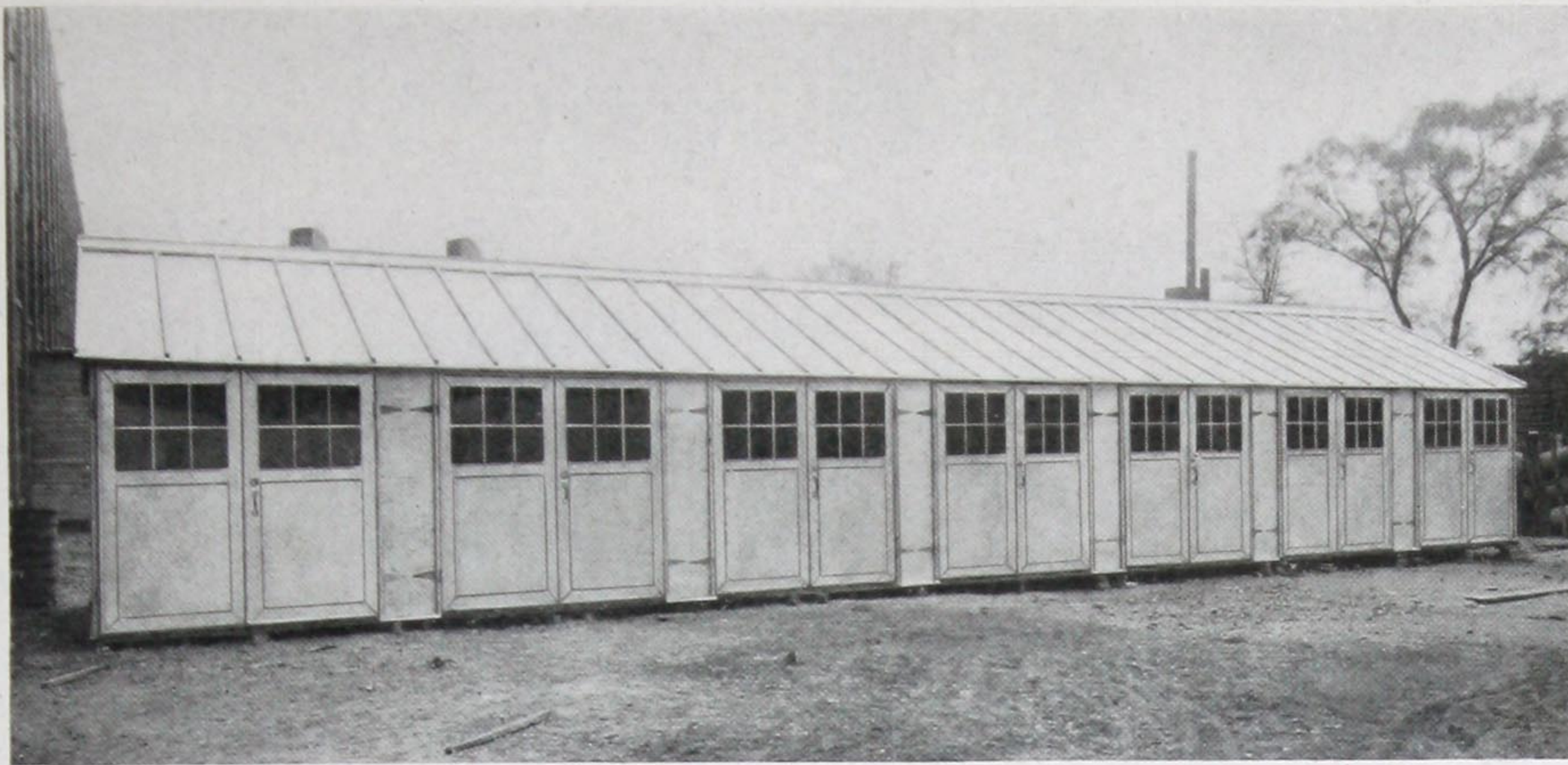
Another advantage is that while Swartwout buildings are durable and long lasting, they can be quickly erected to meet an unexpected demand later to be taken down and erected at a more desirable point.



Multiple Garages

SWARTWOUT metal buildings as multiple garages interest several different groups of people. First, there is the manufacturer, contractor or other large user of trucks who needs a multiple garage for housing his fleet. They may also need daytime garages to house the cars of the executives or workmen of the company, and both these are most economically erected in multiples rather than in separate units.



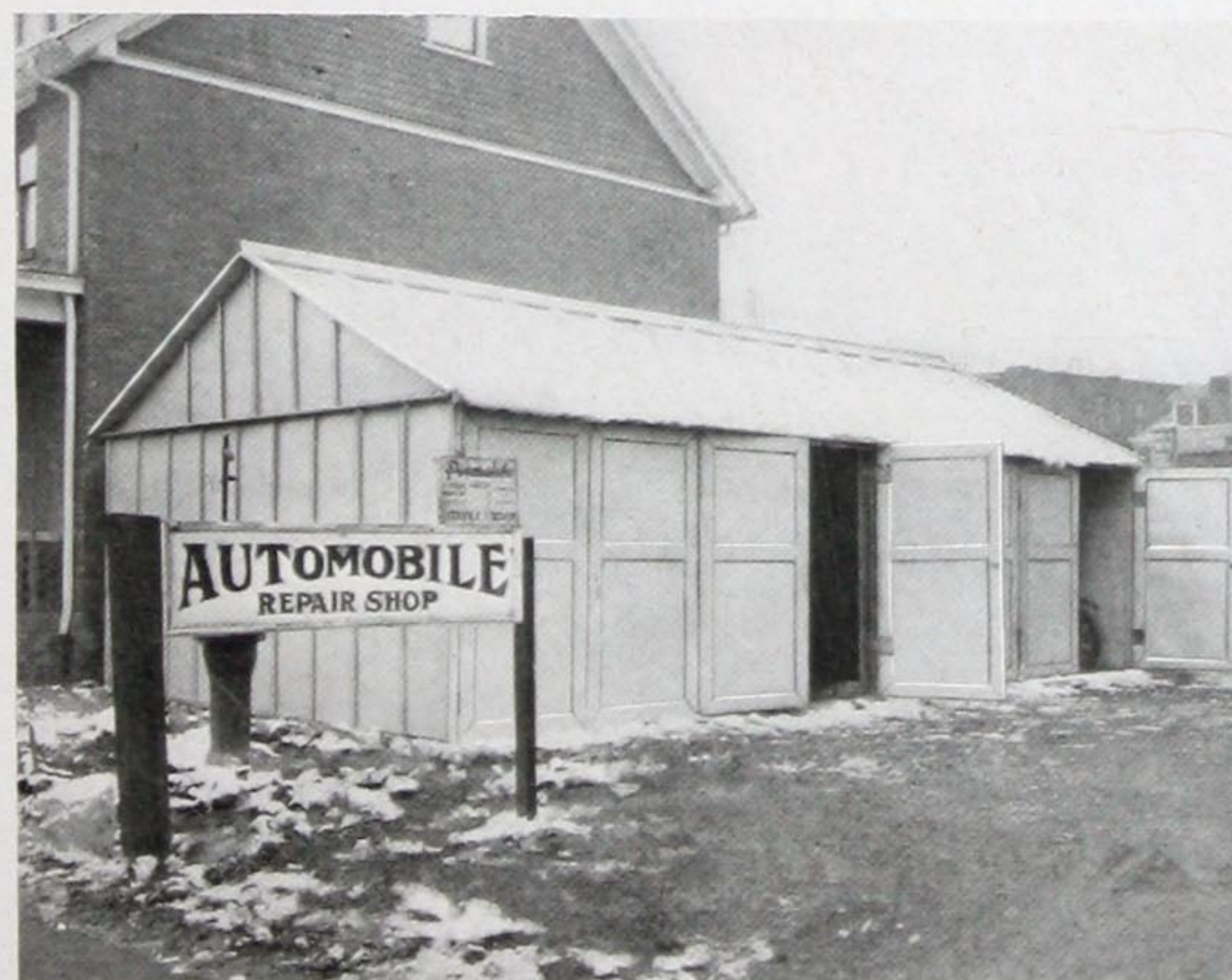


Then there is the community garage where a group of people in suburban towns club together and erect a multiple garage, thereby making a saving for each individual on the original cost over the cost of single unit garages. Attractive lines and good paint make them really attractive and not to be classed with the ordinary idea of metal buildings. Apartment houses and summer resort hotels may avail themselves of the convenience of Swartwout multiple garages for the use of guests.

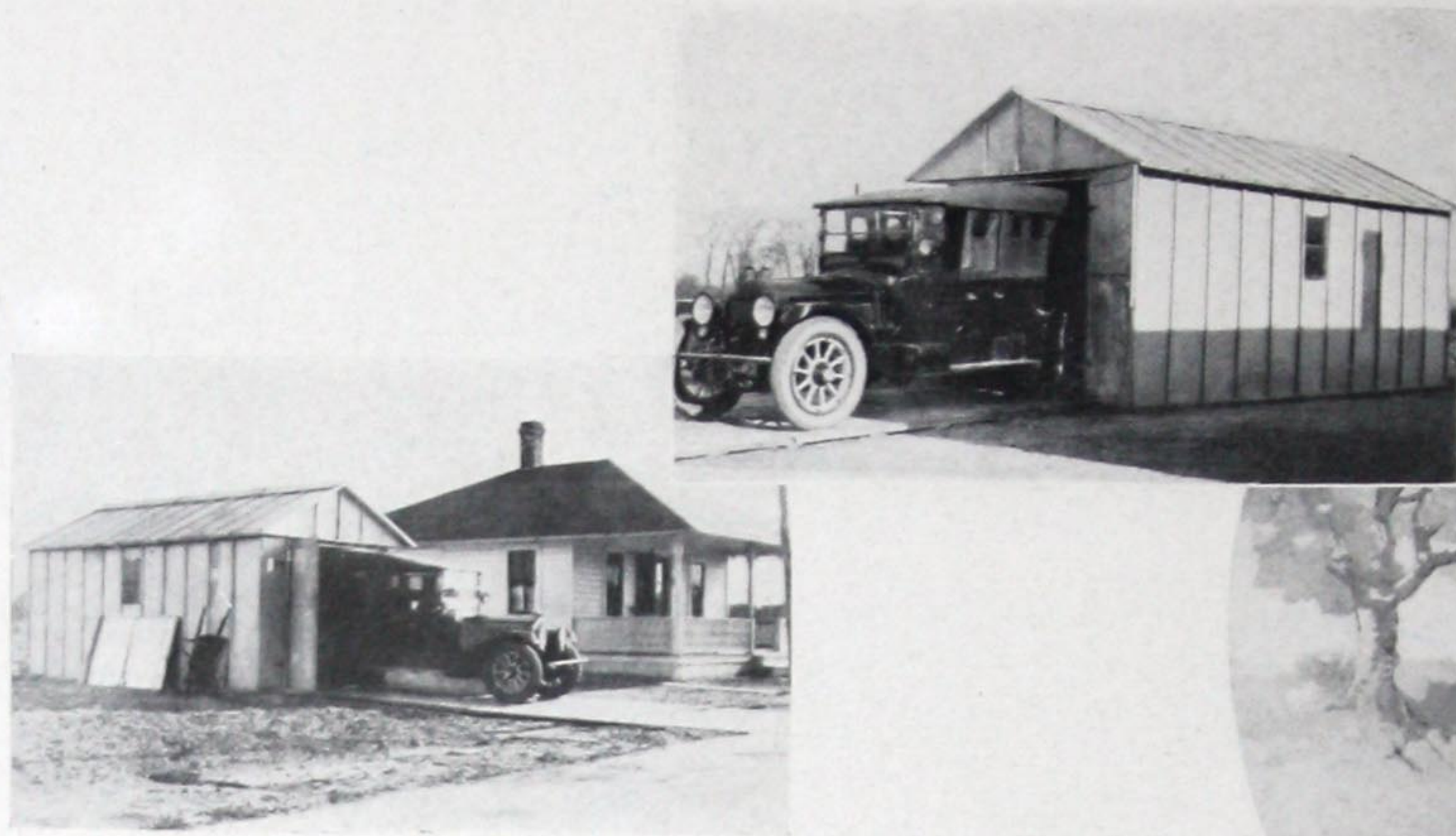
Naturally, being furnished in standard sections, any size desired can be supplied.

It sometimes happens that a piece of property in a city isn't ready for a permanent building and is lying idle. Until such time as a permanent building is erected the lot may be made to yield a good income by erecting multiple garages for daytime checking of cars.

The photographs reproduced here give an idea of the adaptability of the Swartwout for this purpose.



Swartwouts for farm u



THERE is no place where small buildings are more needed for different purposes than on a farm. Swartwouts make exactly the right kind of shelter for farm implements. A shed may be constructed, just as a Swartwout multiple garage is constructed, for housing under one roof all of the farm implements and wagons.

They may be used for stock houses, pig

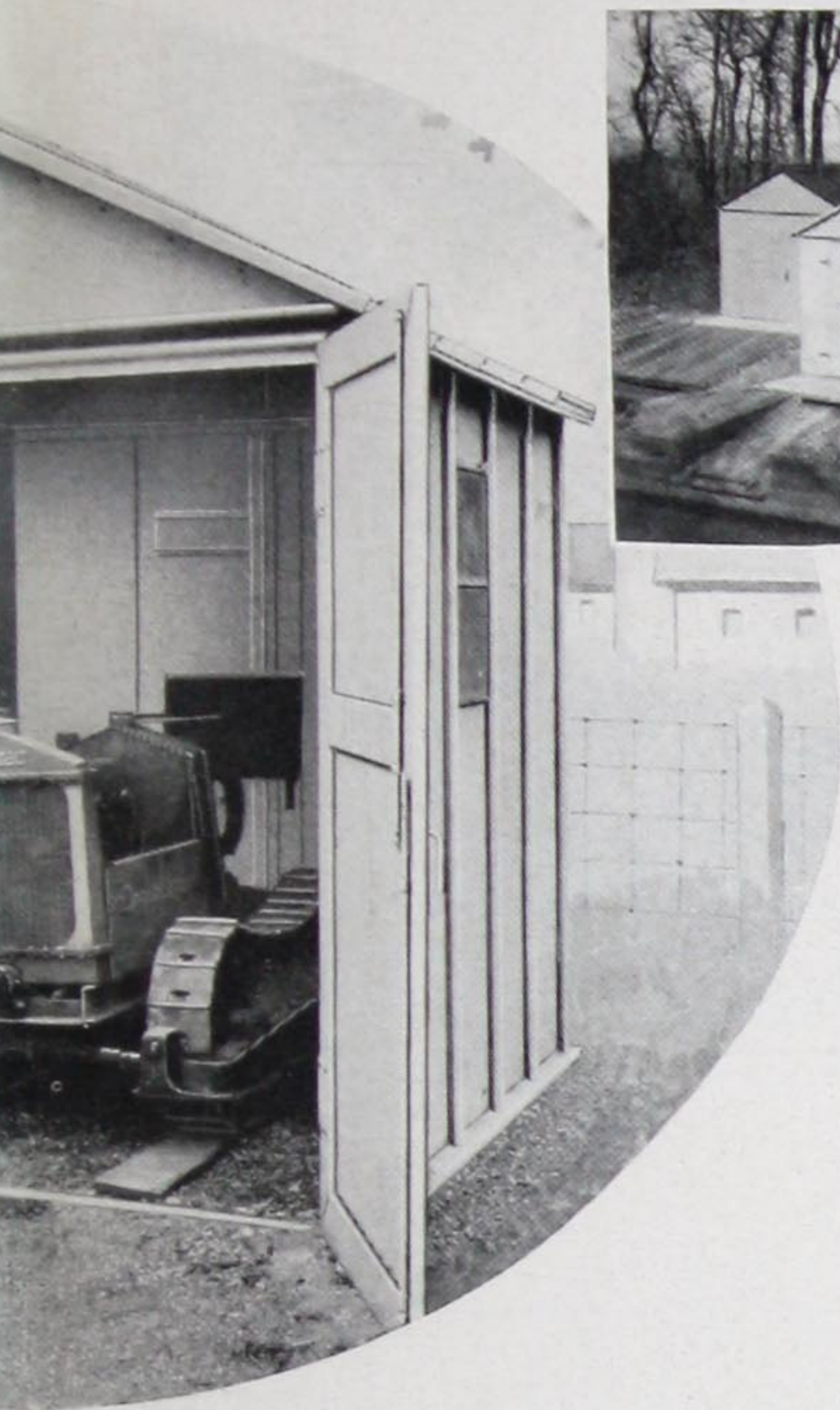


pens and chicken coops. They can be fitted with ventilators. They can be used for any purpose as necessary.

As automobiles, they can be kept in the barn, and offer an economical way of housing them. With a helper can erect.

They are successful for boat houses, cottage, oil filling stations, for housing pumpkins, etc.

e and general purposes



In fact, wherever a small building is needed; wherever a building of uncertain size that may later need to be moved is needed, Swartwout Metal Buildings are the perfect type. A feature that should not be lost sight of is their rust-resisting quality. They are made of special metal and will outlast by years most other metal buildings.

, fitted with Swartwout
may be moved as often

ks and tractors cannot
rtwout metal buildings
elter which any man
complete in one day.

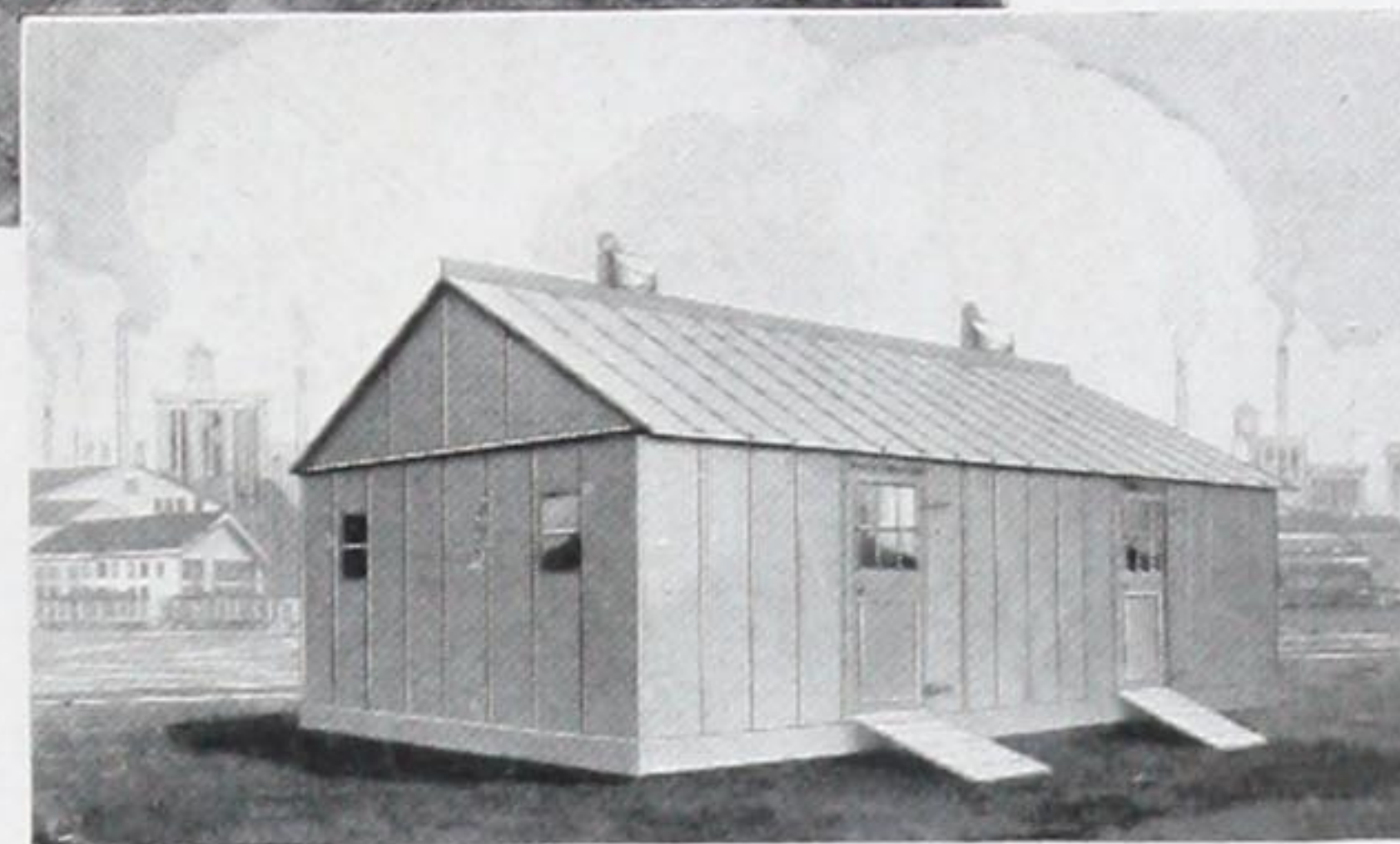
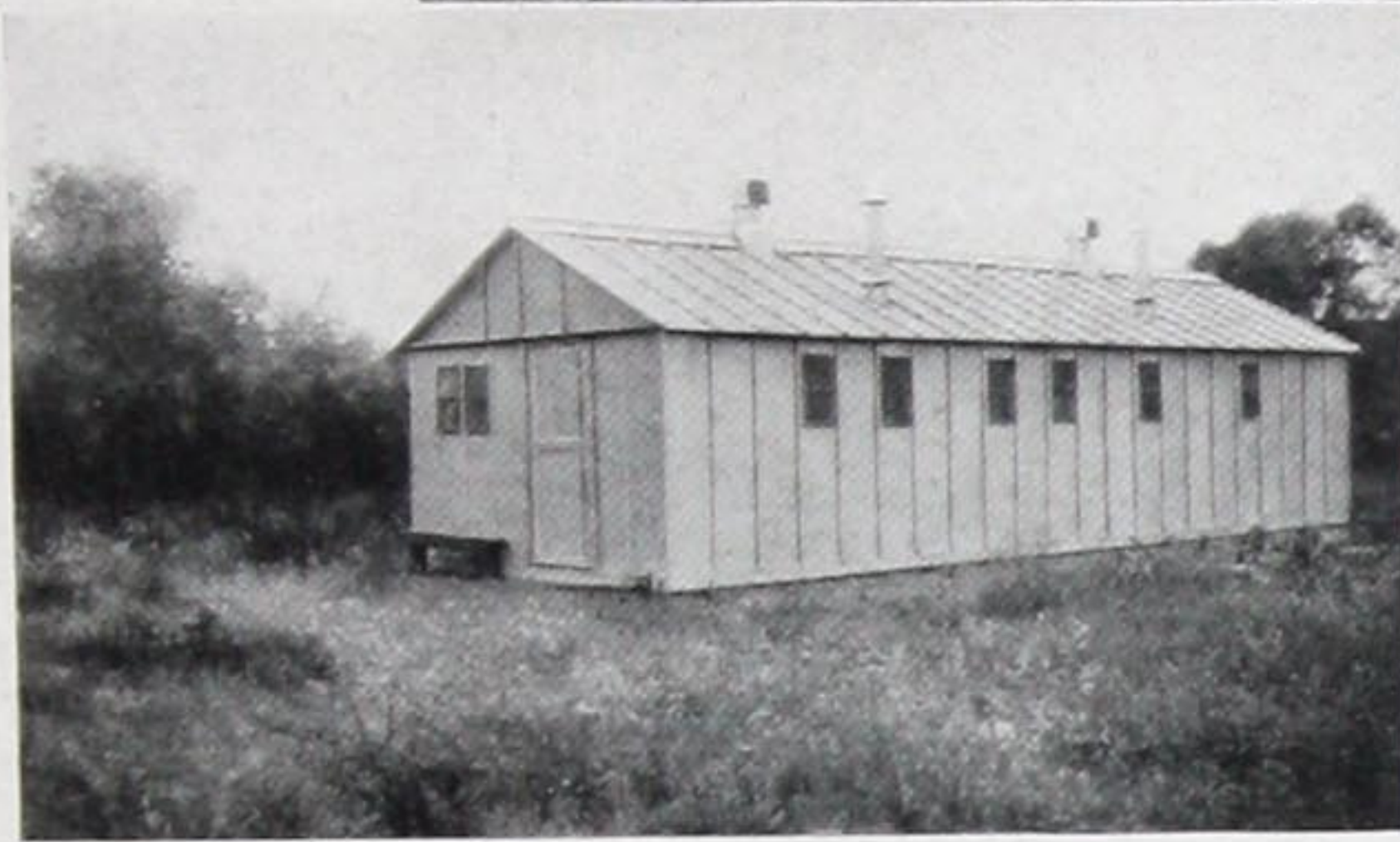
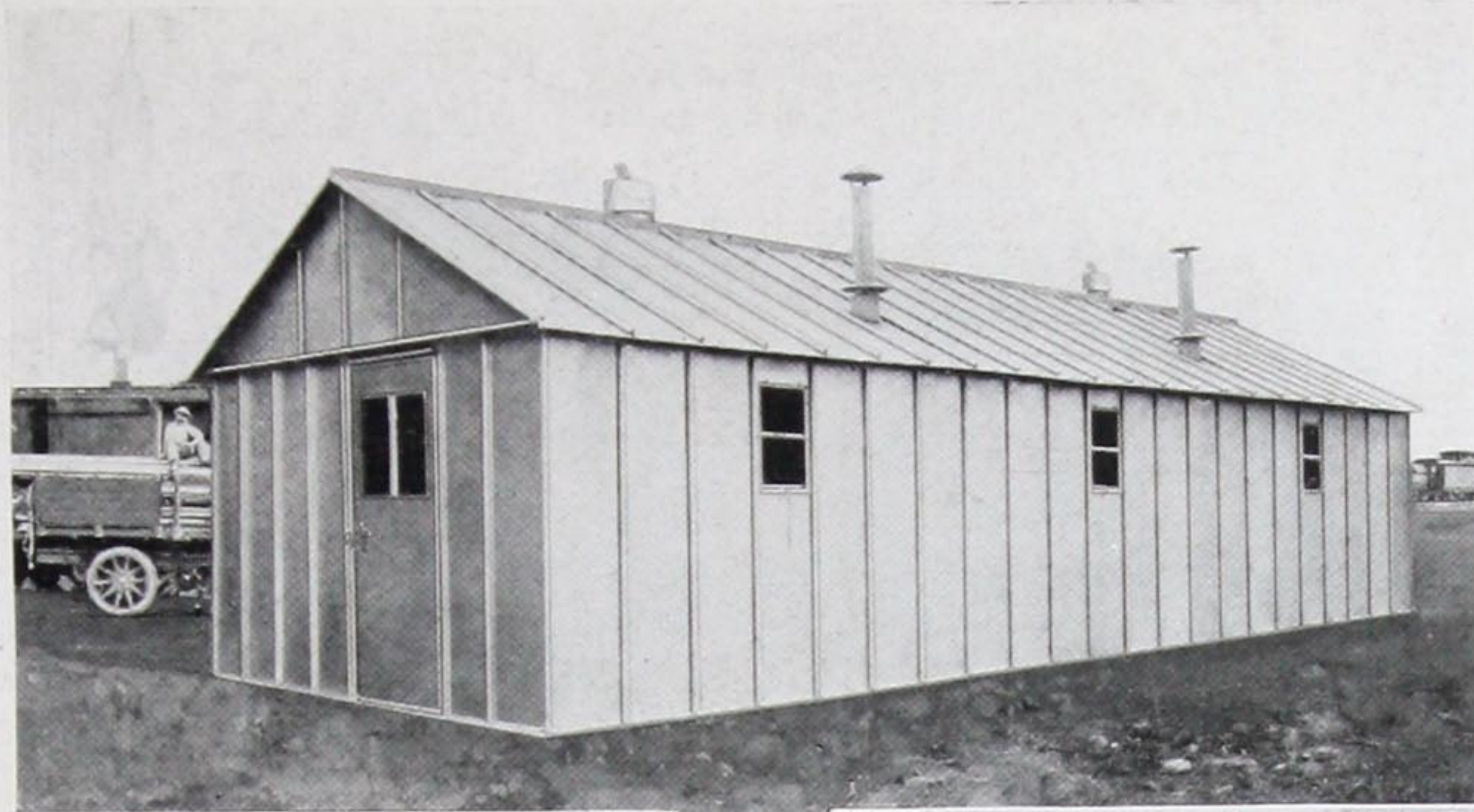
r used for small stores,
and camp buildings, gas-
nd individual garages,
equipment, at water



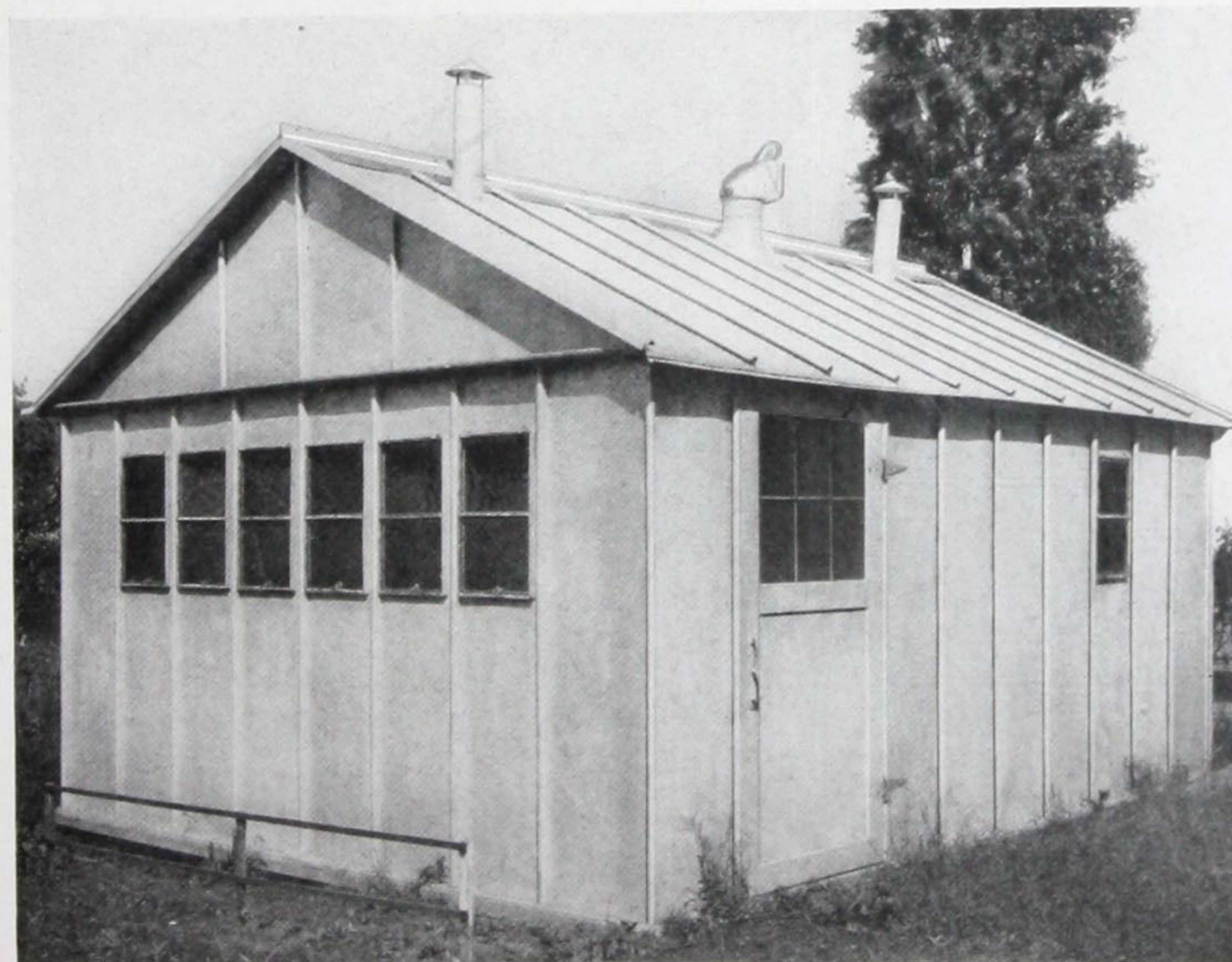
Contractors and Railroads



Contractors find Swartout Metal Buildings ideal for tool houses, superintendents' offices, multiple garages, bunk houses, etc. Their portability and quickness of erection recommend them to the contractor who finds it economical to establish a temporary tool house on a new location while a contract is in progress. After the contract is finished a Swartout building can be sold to someone in the community for practically what it cost. Such buildings make good garages for individual cars and trucks, and sales can usually be made if it seems uneconomical to ship them to the location of the next contract.



Railroads use Swartwouts for section gang tool houses, bunk houses, hand car houses, freight sheds, oil storage, flagman's shanty, section headquarters.

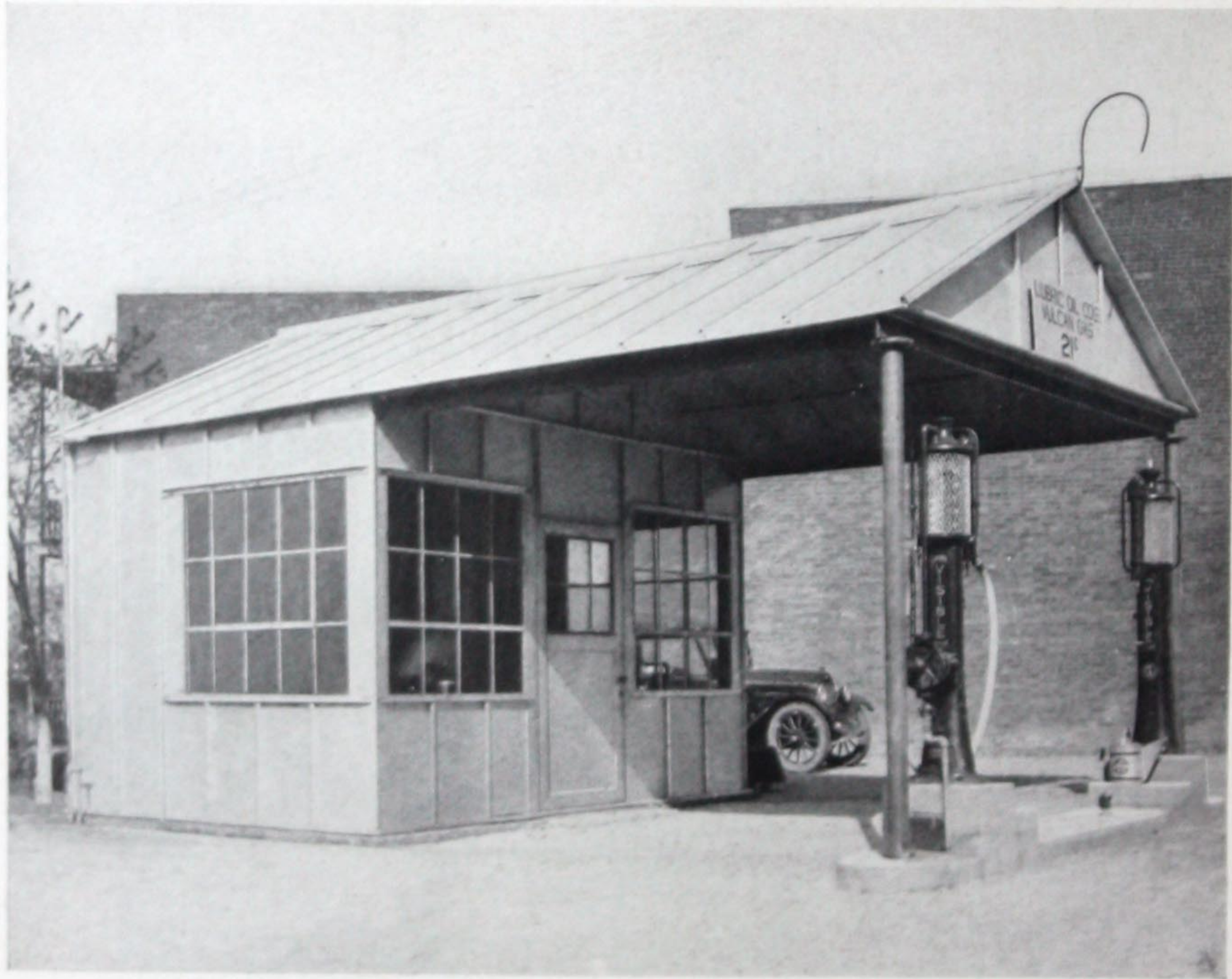


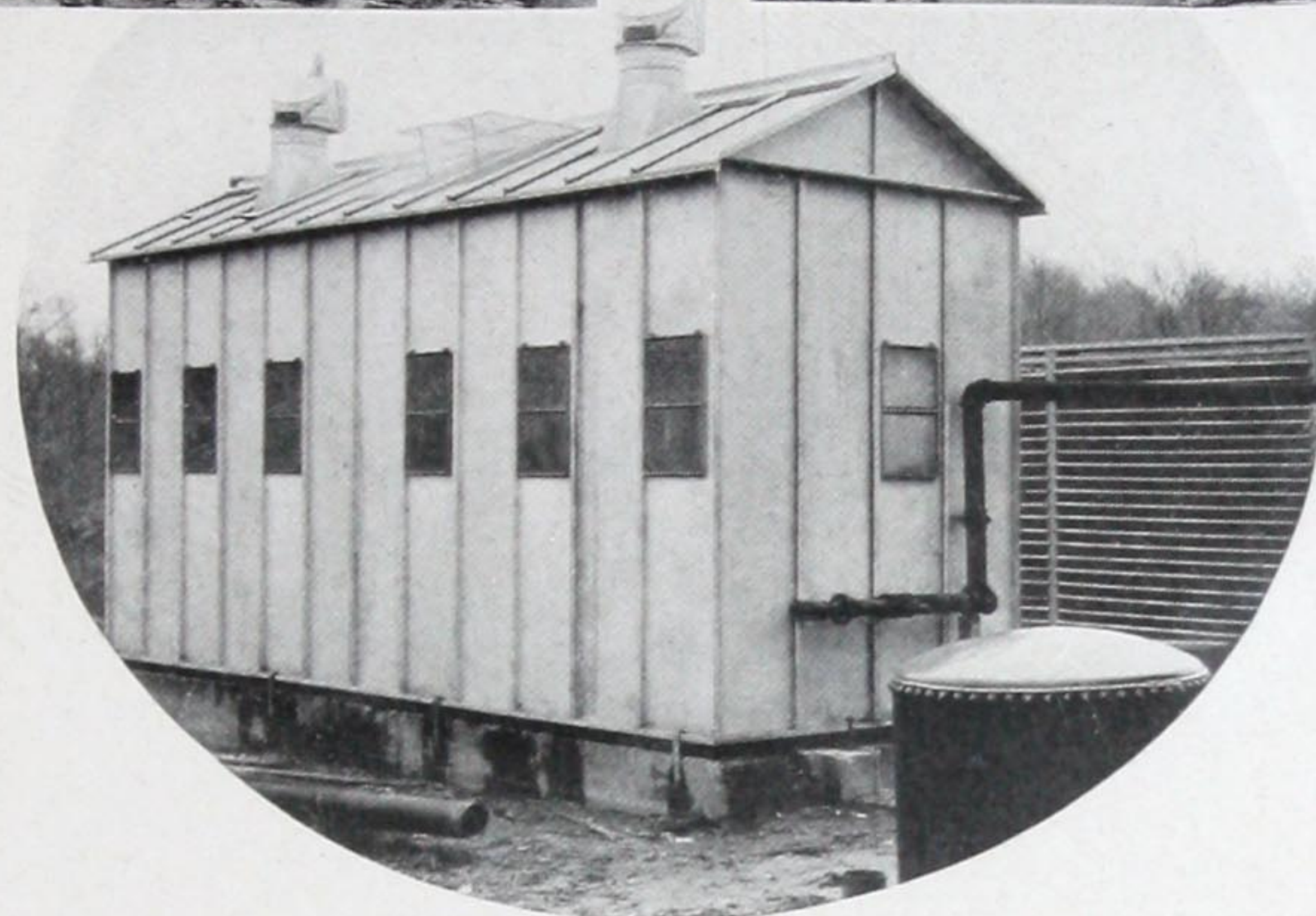
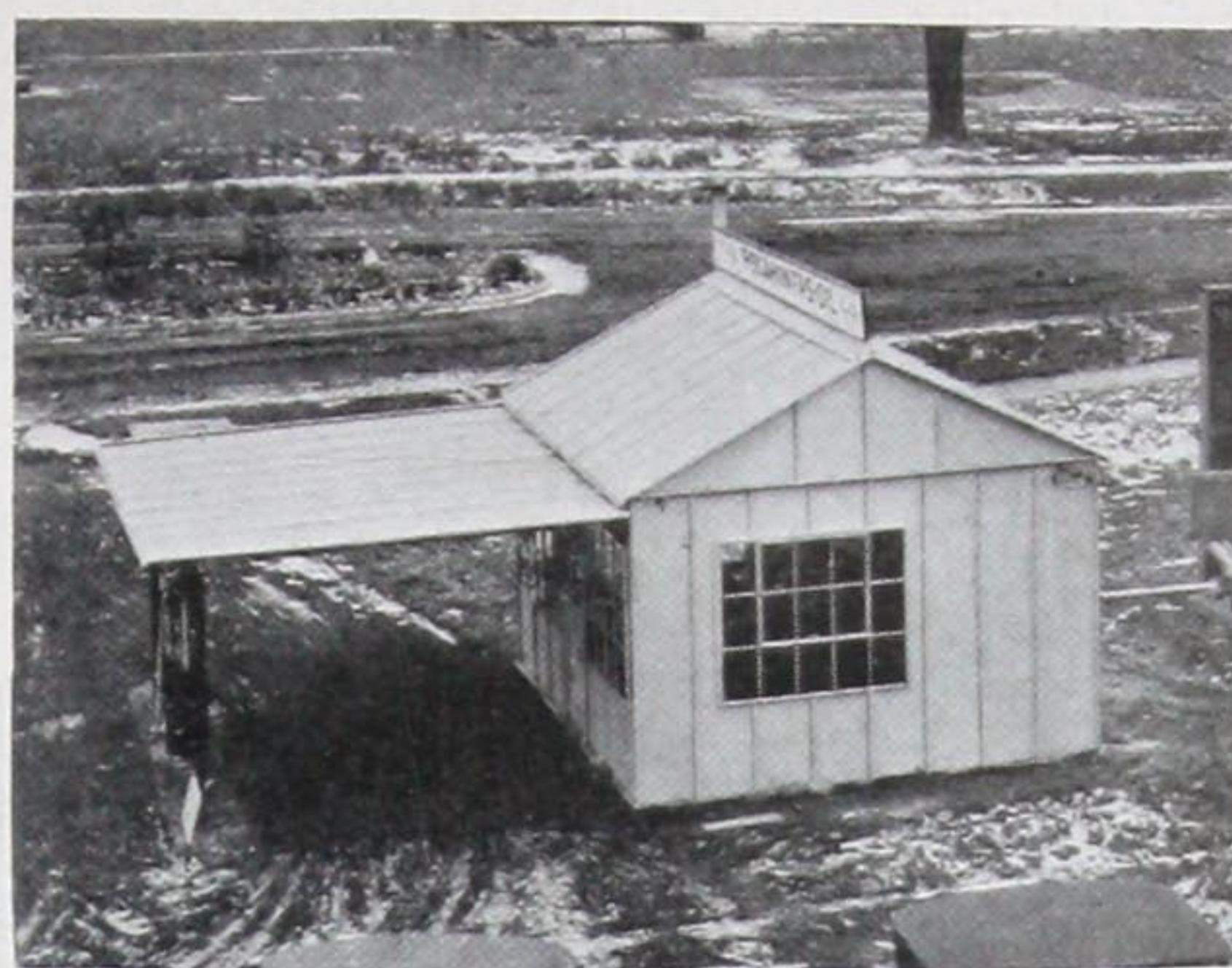
Oil Producers and filling stations

A BOOM town in a mining or oil district might be built of Swartwout buildings entirely, serving for bunk houses, stores, etc. Fear of fire is eliminated by their use.

In the production of oil, where wells may become exhausted and unprofitable for further working, the use of buildings that can be taken down, removed to a new location and set up again are essential. Such buildings must also be of sturdy construction. Flimsy affairs are impossible.

Many of these buildings are of small types—exactly the Swartwout type, made of metal, strong, light in weight and as easily taken apart for moving as it is assembled for use.





Around casinghead or natural gas gasoline plants for:

Vacuum Plants	Refrigerating	Meter Houses
Compression Plants	Plants	Garages
Machine Shops	Pump Houses	Laboratories

As Refineries for:

Sheds for Stills	Car Shops	Power Houses
Tail Houses	Paint Shops	Boiler Houses
Machine Shops	Wax Plants	Auxiliaries
Pipe Shops	Pump Houses	Garages

In the distributing or marketing division for:

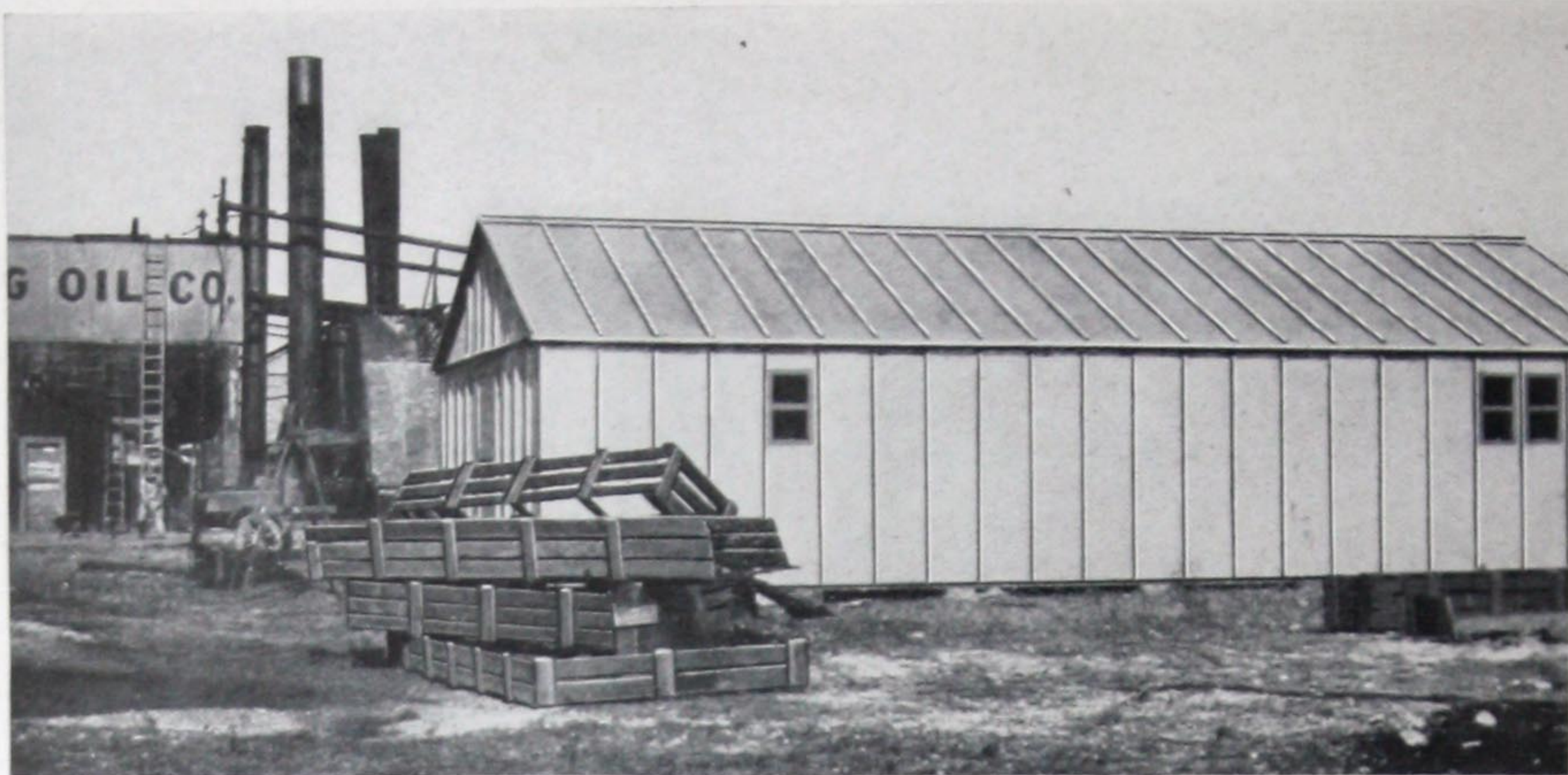
Compounding	Warehouses	"Drive-In" or Re-
Plants	Bulk or Wholesale	tail Filling Stations
Grease Plants	Filling Stations	Garages

Such buildings are used in the producing fields for:

Engine Houses	Machine Shops	Bunk Houses
Warehouses	Gathering Line	Stores
	Pump Stations	

Along pipe line systems for:

Line Pump	Repair Crew	Machine Shops
Stations	Depots	Garages



Shipping Swartwout Buildings

SWARTWOUT buildings are not heavy, massive or clumsy. When taken apart they pack into incredibly small space and weigh a surprisingly small amount. This particularly adapts them for being shipped from the factory to you, and later for being shipped from place to place if your needs require it.

The picture at the top of this page shows in the foreground the empty crates in which the Swartwout building to the left was packed. It bears out our statement that it is almost incredible that a building of such large size could ever have been contained in such small crating space.

On the opposite page there is a drawing which shows how a Swartwout looks when crated. The particular building represented is a garage fifteen feet wide and twenty-five feet long, and it weighs less than two tons. No other kind of metal building could approach this for lightness.

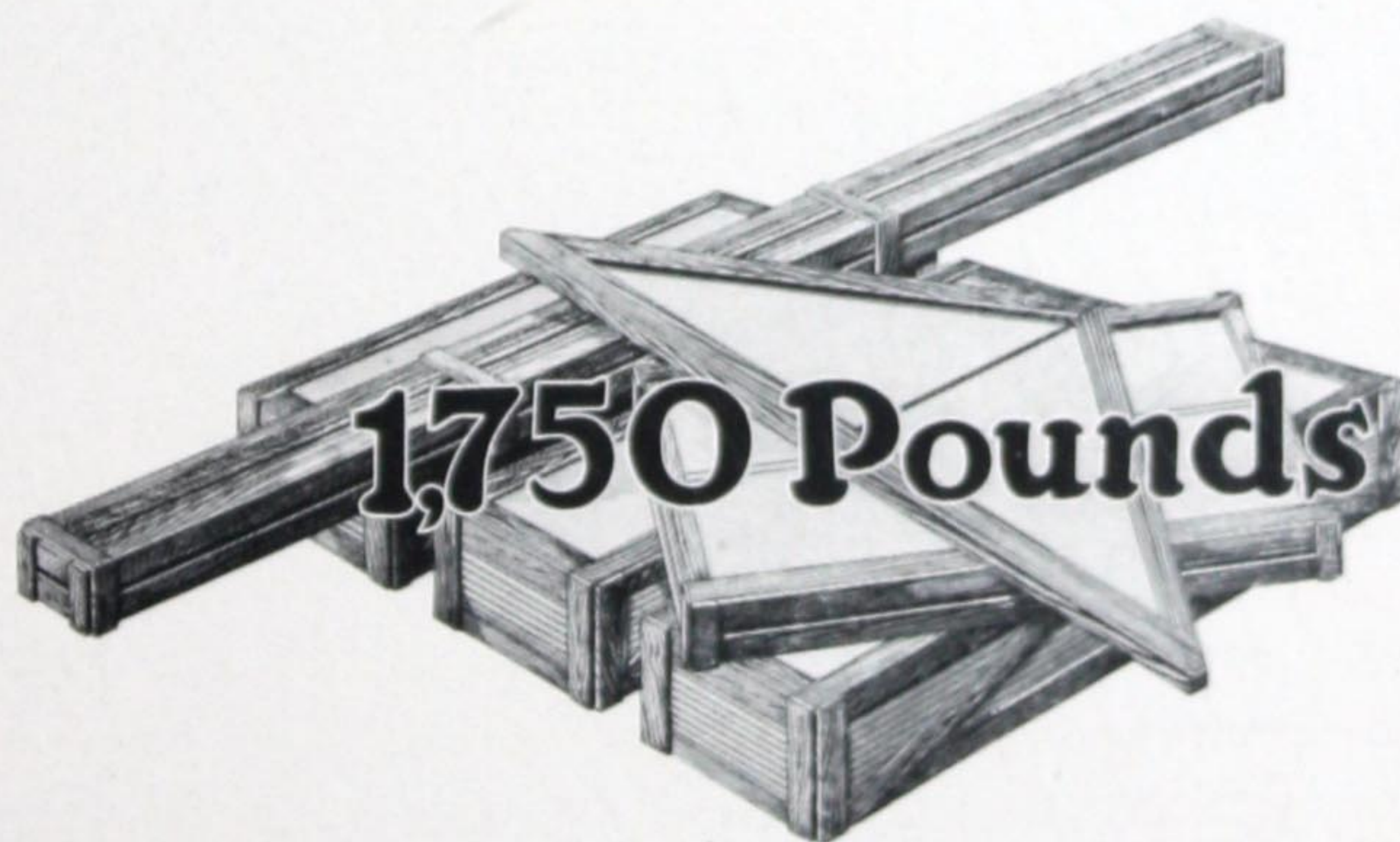
Of course this economy of shipping space and weight facilitates shipping and lowers freight charges. When the building comes to you, you are given a full set of instructions together with an erection chart that makes the putting up of a Swartwout a very simple matter.

To meet an urgent demand

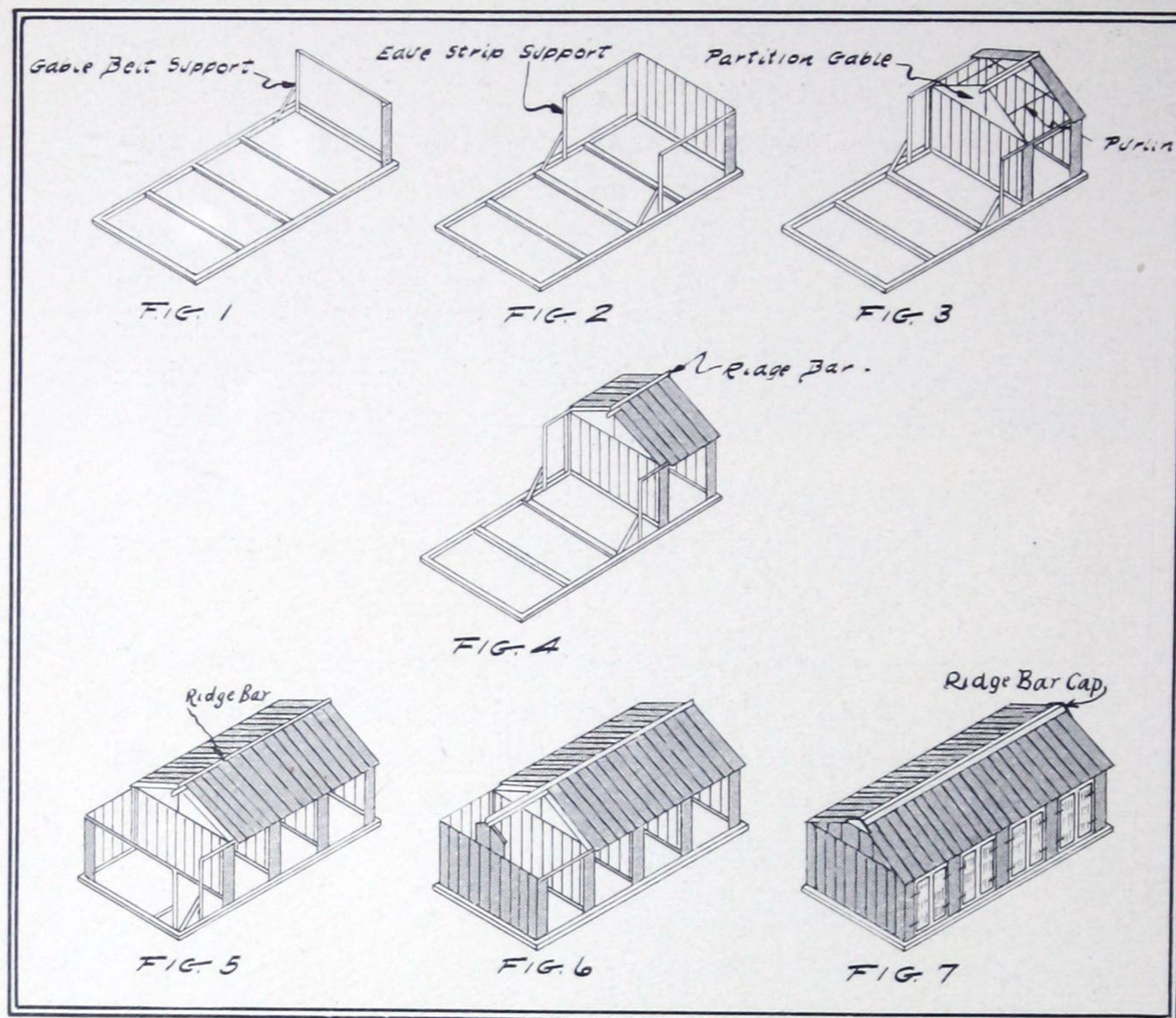
SWARTWOUT Metal Buildings are especially adapted to meet an urgent demand arising when a building has to be put up quickly. Even before plans can be drawn for a frame building to be erected by usual methods and long before any work can be done, a Swartwout can be shipped to the site, be put up and occupied. This feature is of great advantage in meeting some unexpected demand for shelter arising in an industrial plant or to replace a building destroyed by fire or in any emergency where speed is essential.

We are glad to cooperate with our customers in shipping a metal building at the earliest possible moment where a need for haste exists.

On page 24 under the heading, "Some details of construction" the data will provide a simple method to estimate the size of a building to be obtained by the Swartwout method. The standard panels are 22½ inches wide and the building must be some multiple of these standard sheets.



How a Swartwout is put up



Drawing that accompanies each building

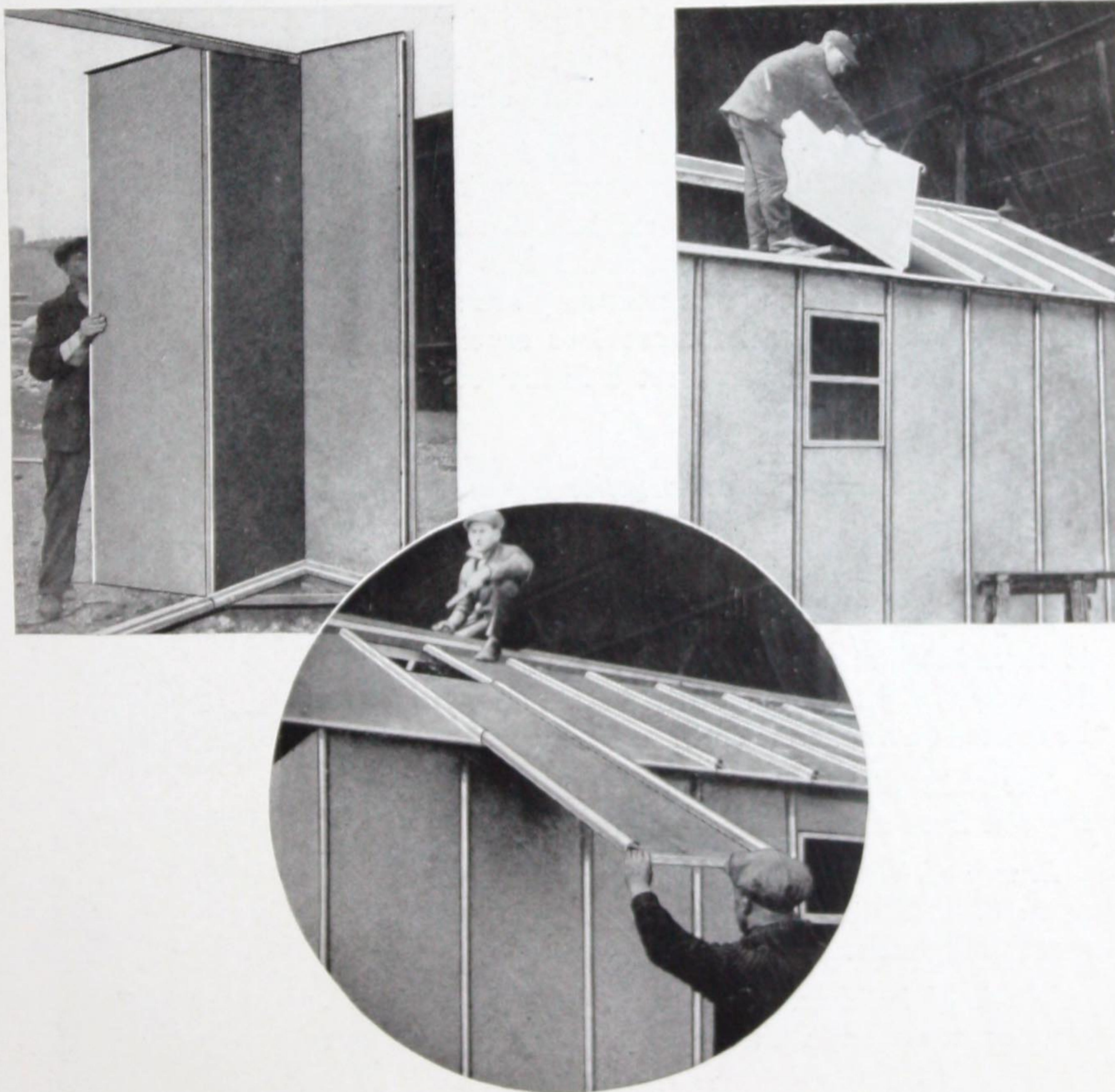
IN A book of this kind it might be perfectly fair to show you the easiest possible case of putting up a Swartwout. But we have chosen instead to illustrate the most difficult case, believing that even here in limited space we can show how easy even this one is and thereby establish the fact that a Swartwout is the easiest building to erect in existence, bar none.

Above we illustrate the chart that accompanies a multiple garage, having solid partitions between each section. With this chart are furnished complete instructions that go into detail, referring to the different pieces of metal by number. For instance Ridge Bar section (Fig. 4) part 390 is shown. That number is plainly marked on the ridge bar itself.

It is impossible to give a typical set of instructions here, but let us quote one paragraph so that you can see how you are directed to proceed, step by step, and how you are guarded against error by the numbering of every piece of metal in the building.

"Erecting Side Wall Figs. 1-2-3-4. Start at the extreme right of left side (same as with sill covers) with wall panel right of door No. 1006, lock a standard wall panel No. 1001 in the right hand side roll of No. 1006, and swing the standard wall panel No. 1001 around completing the left side, right hand corner. Nail or screw bottom edges to sill, being sure that bottom flanges of panels projecting outward and top flanges projecting inward."

The five step diagram shown on the next page shows how the work progresses, step by step, orderly, efficiently, from the starting of the first section to the finished structure.



Swartwouts may be erected on the simplest kind of foundation. A base of 4 x 4" placed on the ground is sufficient. Or a concrete base with wooden sill may be used if for permanent use.

As good an idea as can be obtained of the simplicity of locking one panel into another is shown by the several photographs. One shows a wall section about to be folded into place. The patented interlocking joint has been meshed with the joint of the preceding section, and the mere folding of it into place, locks the joint permanently making it weatherproof and forming the equivalent of an upright tube which takes the place of structural iron superstructure.

Another shows a roof section just being meshed and folded into place, while the third shows how the last section of the roof slides into position.

As already stated, the process of erection is so simple, the instructions so clear and definite, the weight of the individual pieces of metal so light and the bolts necessary are so few that one man, without previous experience, and one helper can erect a Swartwout in a day.

Some details of construction

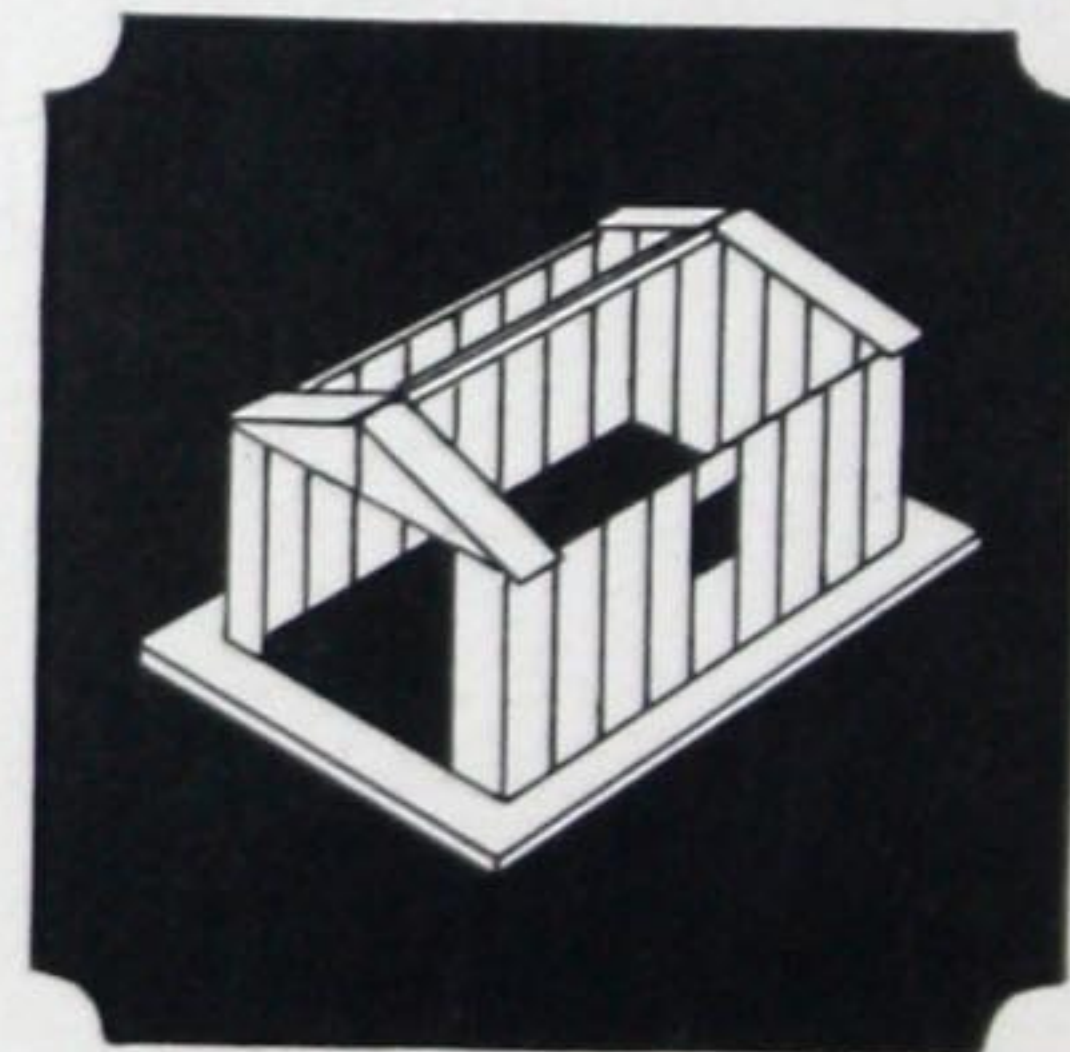
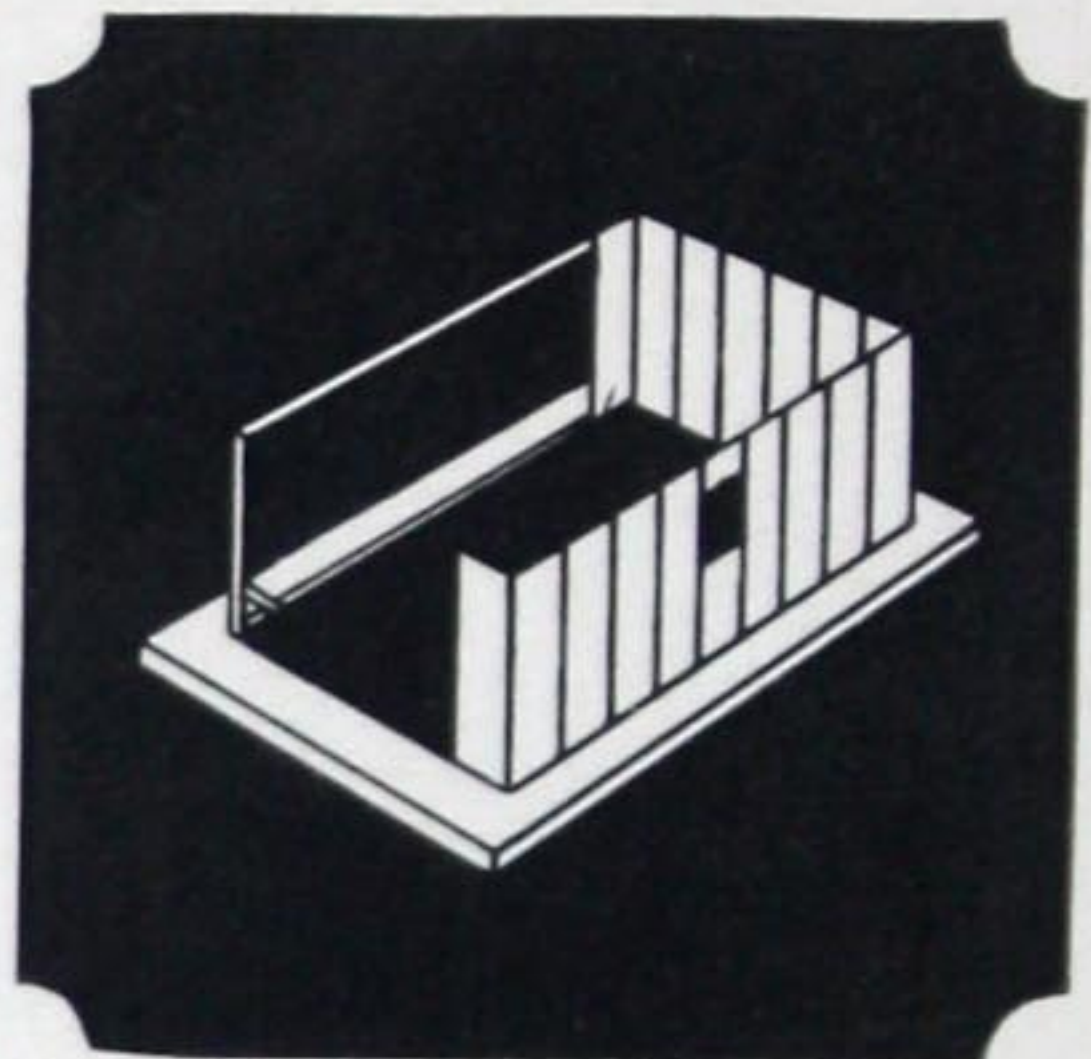
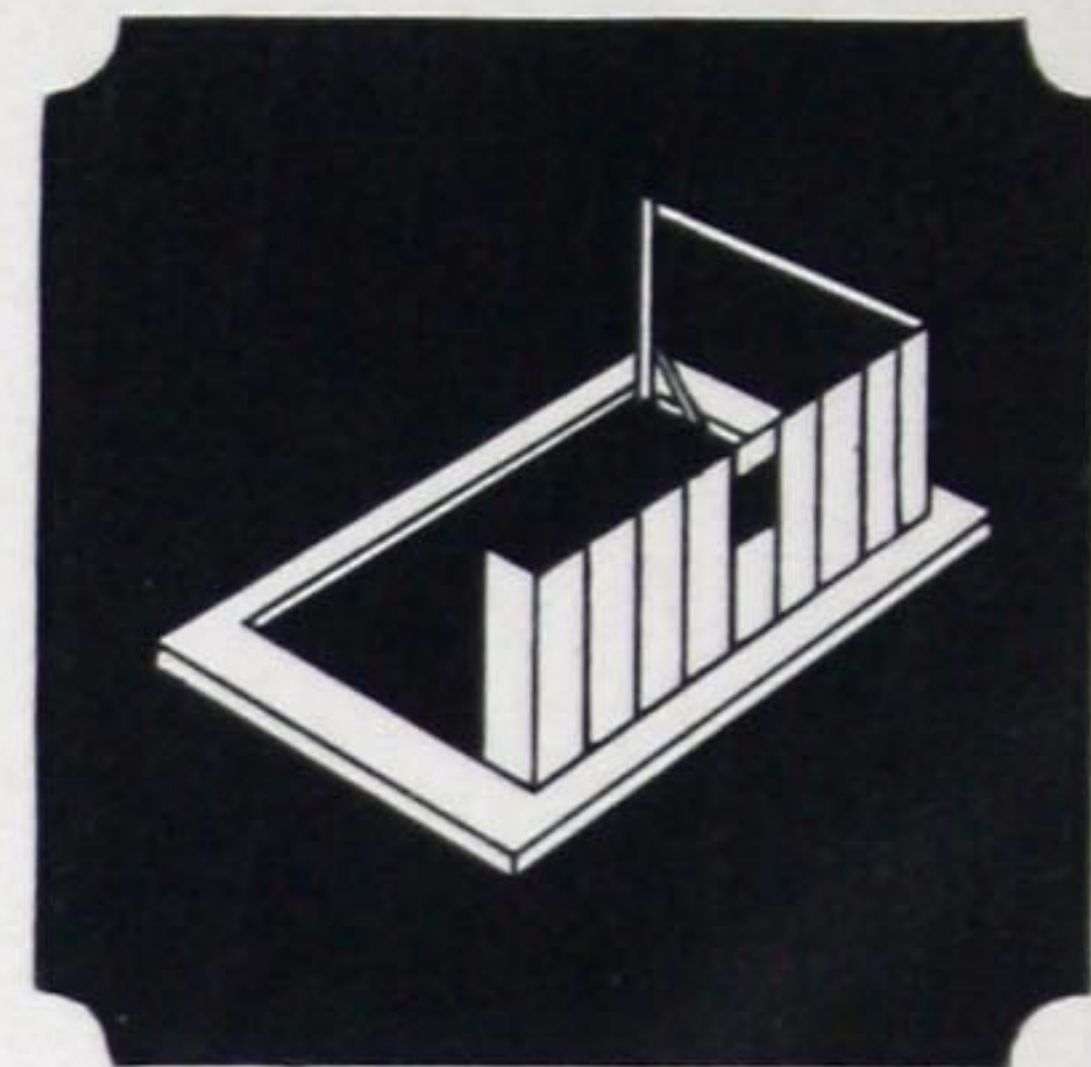
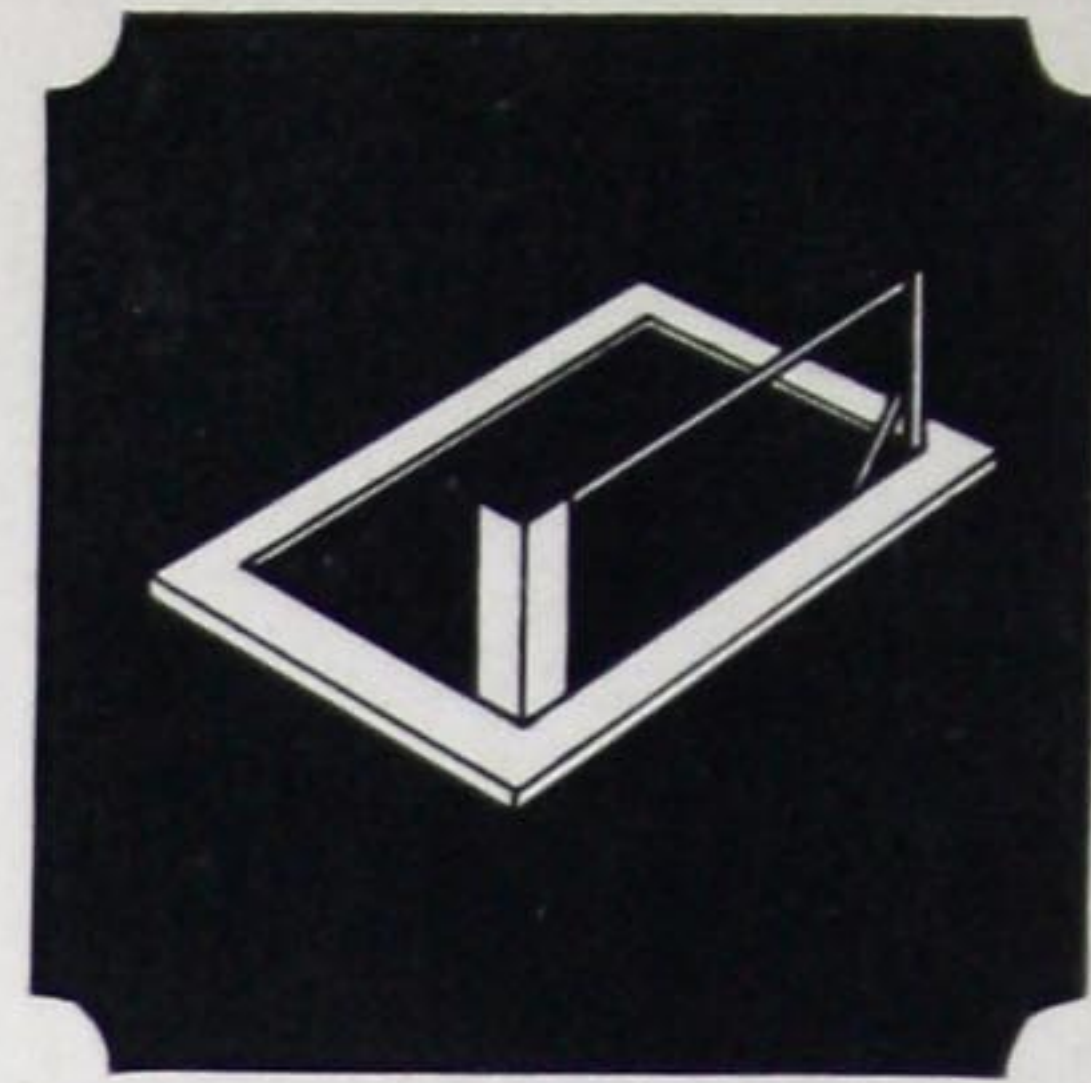
Width of panels. Each panel is 22½" wide in place.

Height of wall panels. Panels are furnished in three heights: 7' 10", 9' 10" and 11' 10". If greater height is desired, the building may be erected on a concrete curb.

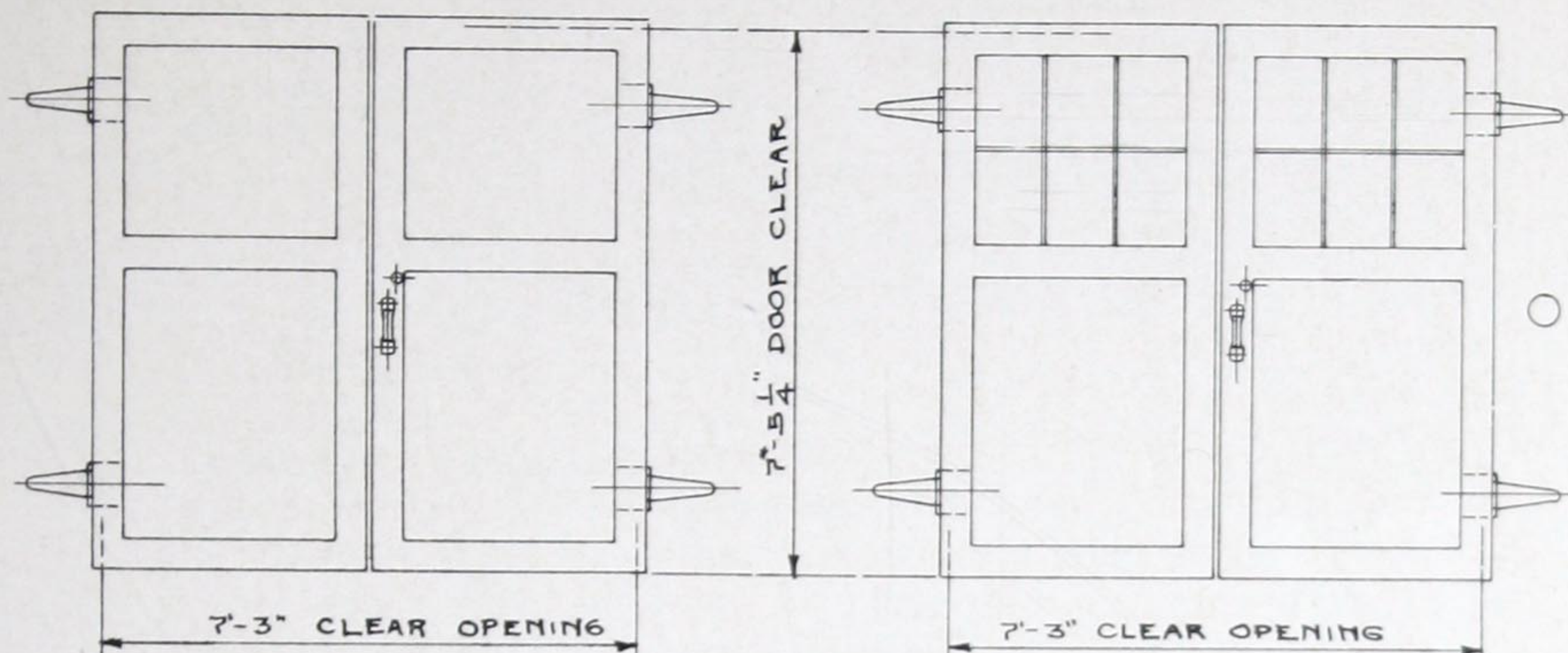
Size of buildings. A building can be made any size from two panels square, up.

Length of building. A Swartwout can be made of indefinite length merely by adding more wall panels.

Width of building. Swartwout Buildings can be made of any width.



Details of Doors, Windows, Foundations, etc.



THE strength of the doors, a part ordinarily neglected, is one of the superior features of Swartwout construction.

All doors are constructed from well dried heavy wood frames, preventing warping, and covered with the same high grade rust-resisting metal used in the building proper. Cross bracing for varying heights strengthens the doors still more.

Hinges of substantial size, carefully sherardized to resist rust, absolutely eliminate "sagging" of the doors.

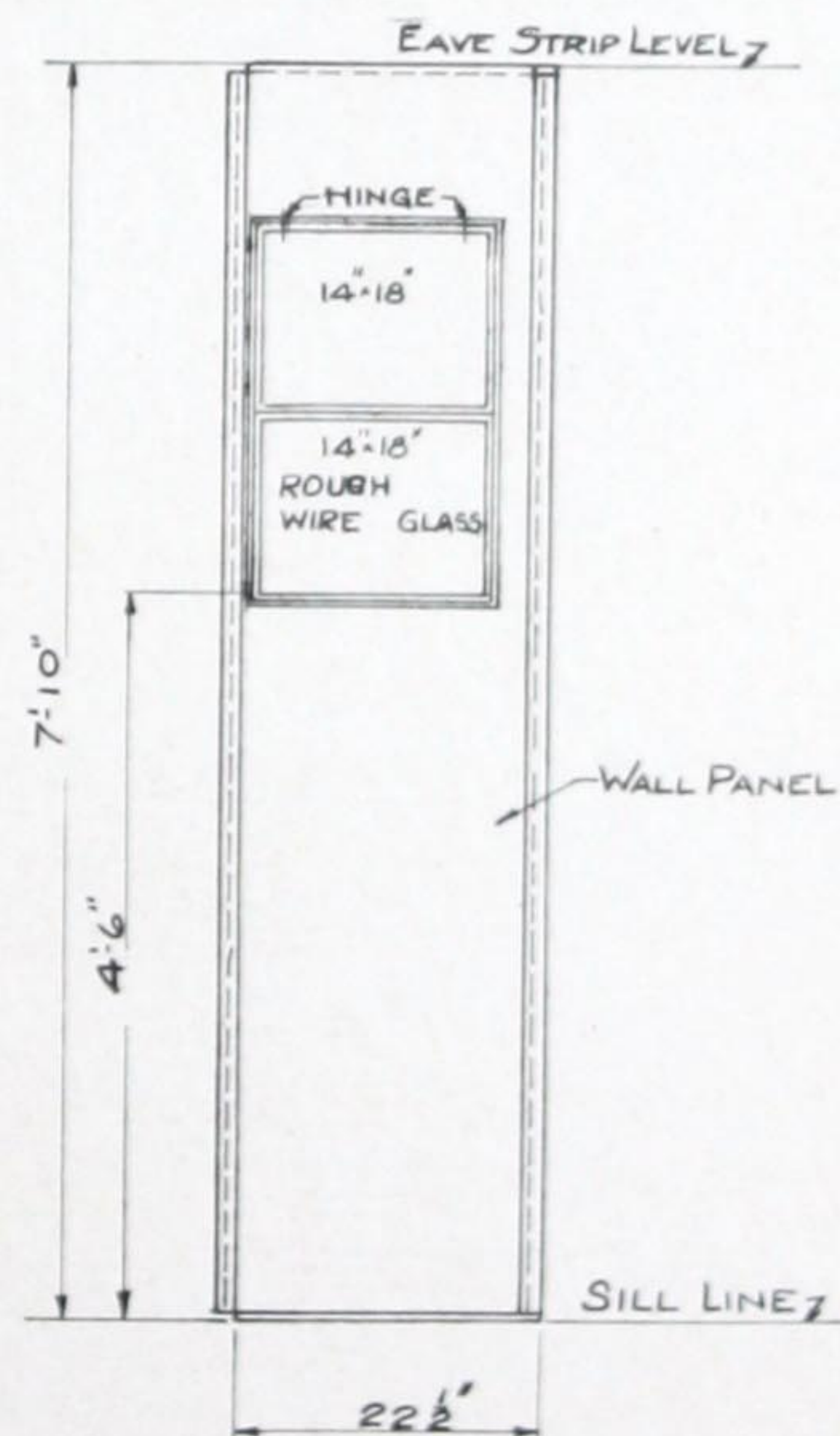
All doors are furnished complete with Yale type spring locks and two keys.

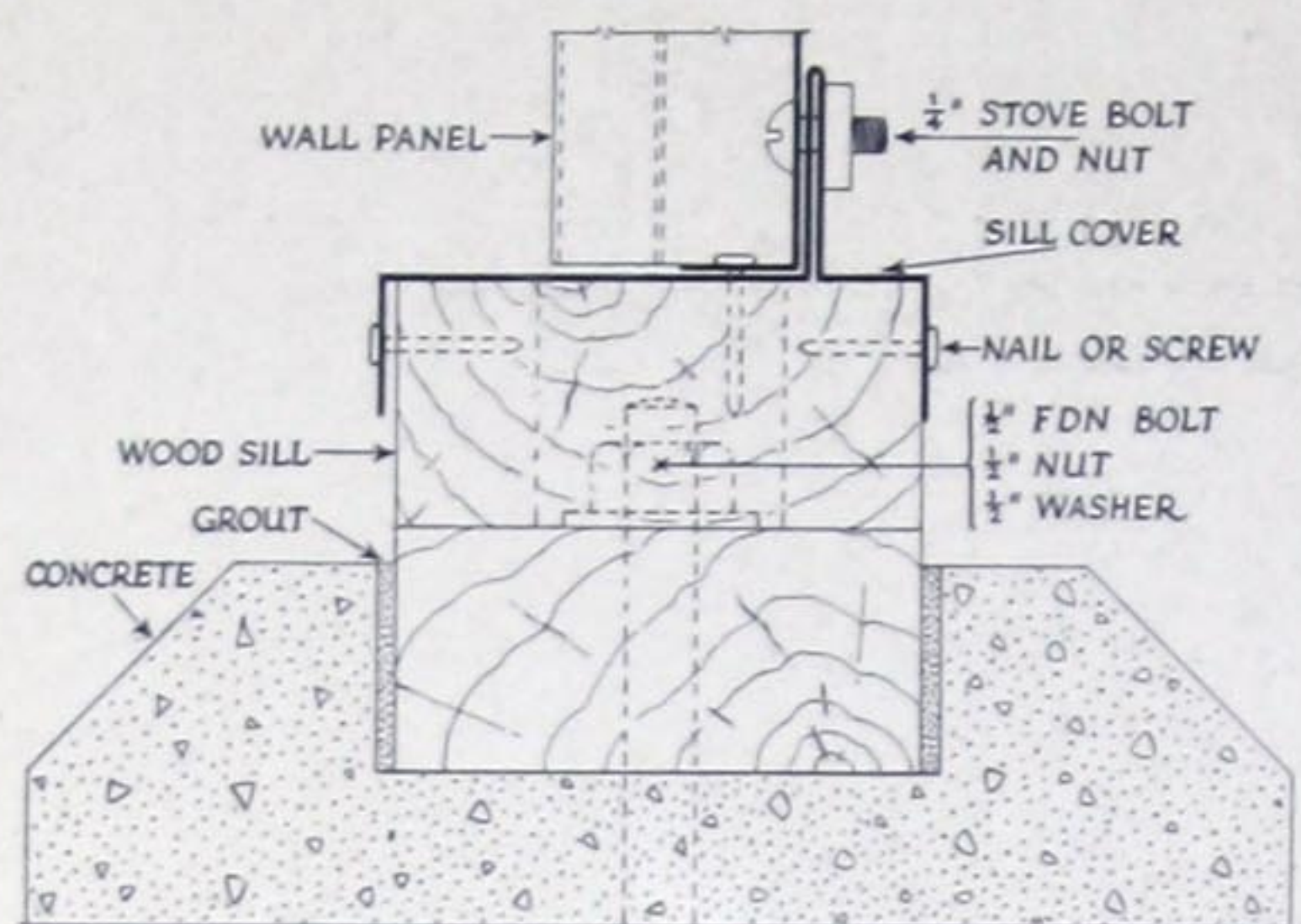
Double doors are also furnished with top bolt and toe bolt so that one door can be kept closed.

Single or double doors can be furnished in heights and widths to meet customers' requirements, and located wherever desired.

If desired the doors can be supplied with Door Windows. These windows contain 6 lights, each 11" x 15", in a rust proofed sash, securely anchored in the door itself. No amount of jarring can displace it. Clips, welded on the sash, hold the glass securely in place.

Standard sidewall windows are placed in panels which are interchangeable with regular wall panels, so that all windows can be concentrated in one wall, or scattered thru all sides as desired. The standard window 18" x 28" is made of heavy





CONCRETE FOUNDATION

For more or less permanent installations or for large buildings, the concrete foundation is recommended. Erecting instructions which we furnish give detailed data covering its construction, including the location of the anchor bolts to which the standard 4" x 4" wooden sill (which we furnish) is attached. After the sill is bolted to the foundation and the small space between them filled with thin cement, erection of the building proceeds exactly the same as though placed on a plain wooden sill.

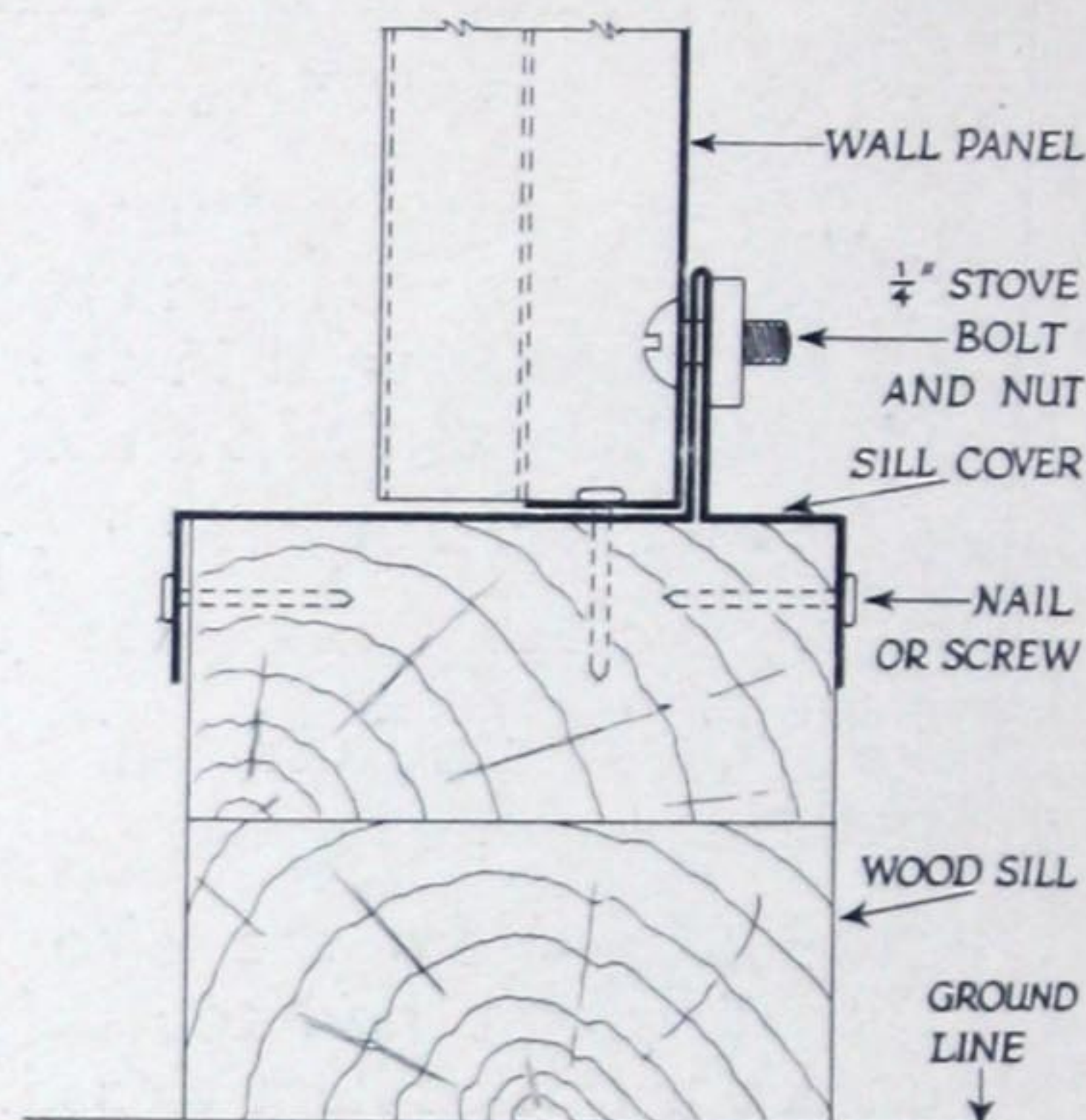
Even though securely anchored and permanent in every way, if desired, a Swartwout Metal Building on a foundation of this kind can be knocked down and moved, without difficulty or loss of any part except the wooden sill.

While we furnish definite details covering foundation layouts after specification is received, the two types shown are probably the most widely used.

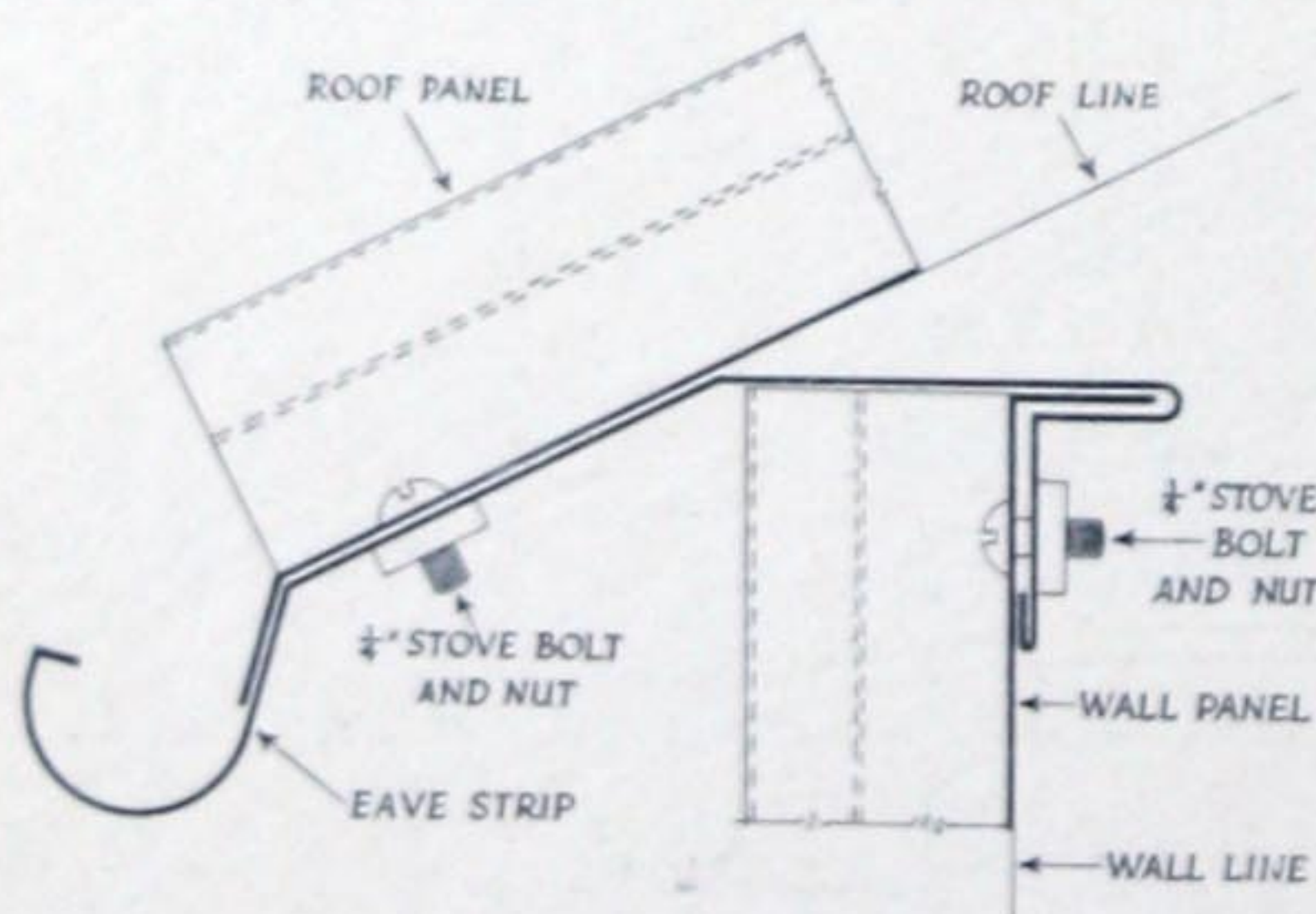
For temporary installations a 4" x 4" wooden sill (we furnish it, cut to size) placed directly on the ground is sufficient in most cases. After squaring the foundation as shown in the erecting instructions furnished with each building, the construction will proceed with extreme ease. Buildings on foundations of this kind are readily portable and every part can be salvaged, even including the sills.

The detail of the section through the eaves at the sidewall will give a comprehensive idea of the simple construction and the ease of erecting Swartwout Metal Buildings. Two bolts in each sidewall panel and the same in each roof panel at this point, give the building strength, rigidity and tightness.

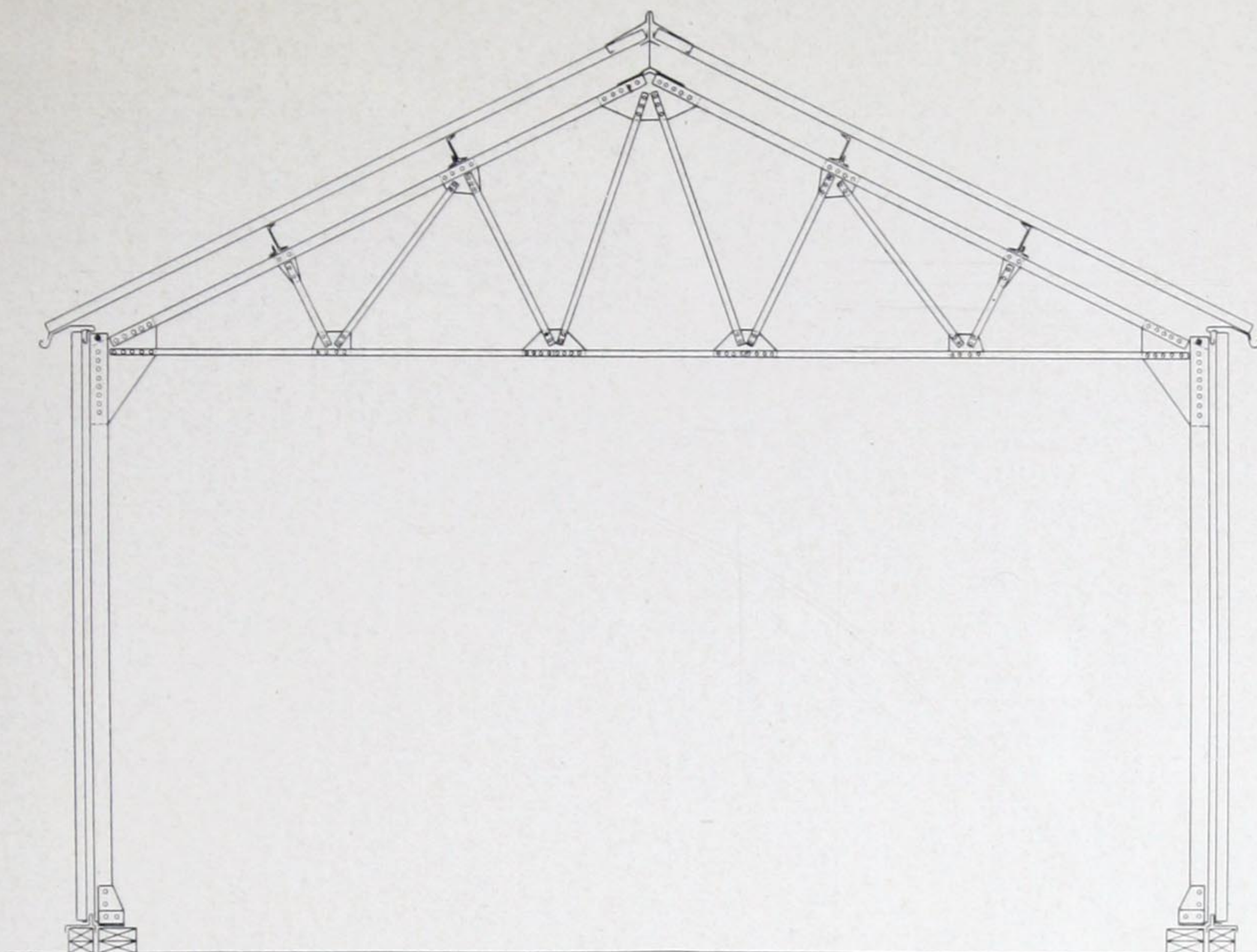
All bolts and nuts are sherardized and all raw metal edges protected from the weather, so there are no ugly rust streaks on Swartwout Metal Buildings after being in service a few weeks.



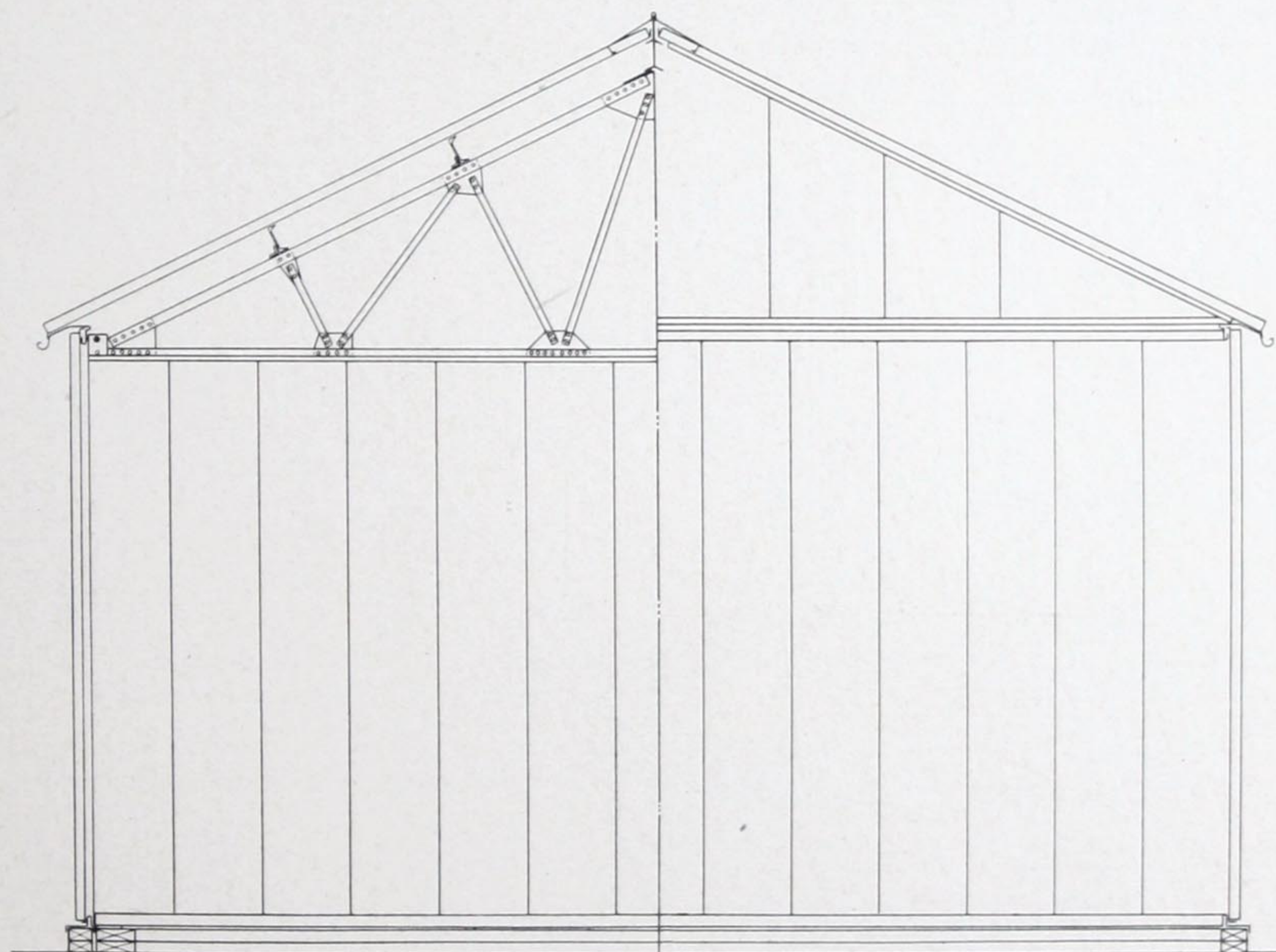
SECTION THROUGH SILL



SECTION THROUGH EAVES

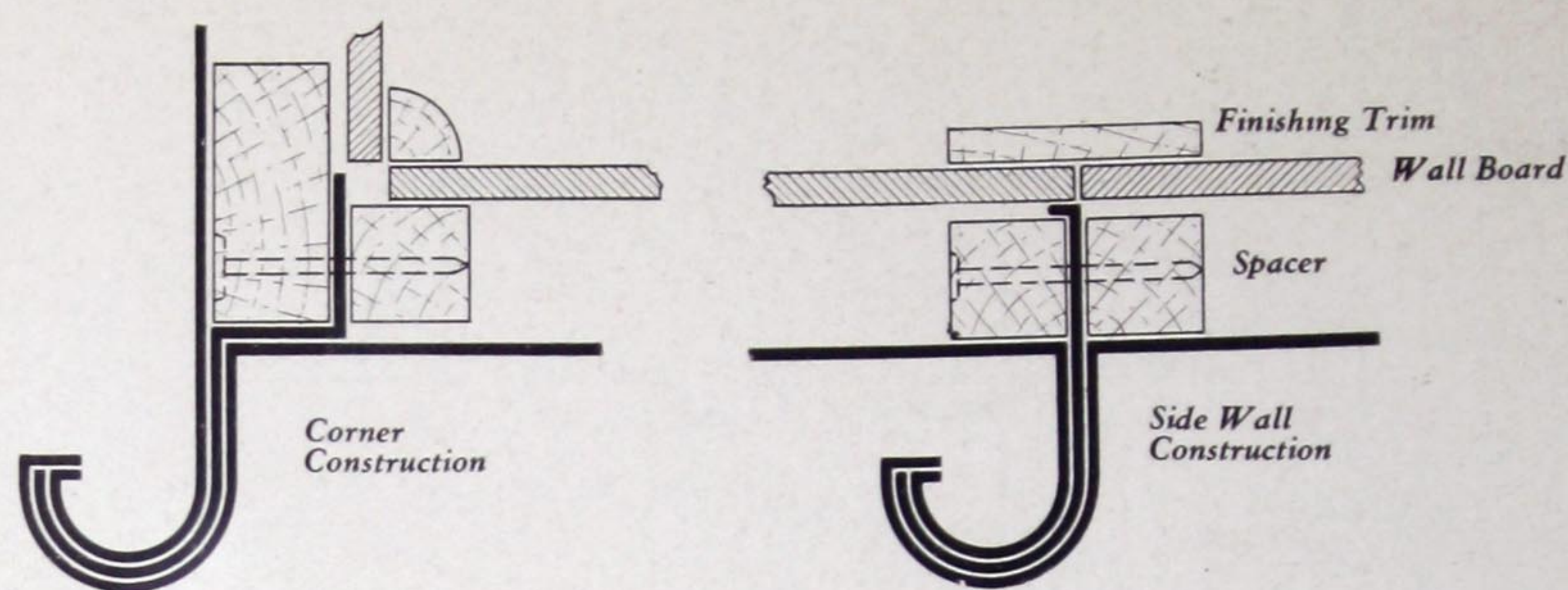


Details showing Swartwout metal buildings in large sizes, equipped with trusses.



*CROSS SECTION OF SWARTWOUT METAL
BUILDING WITH PARTITION TO EAVES*

*CROSS SECTION OF SWARTWOUT METAL
BUILDING WITH PARTITION TO ROOF*



This cut shows how wall board is put on metal buildings.

How to line Swartwout Metal Buildings

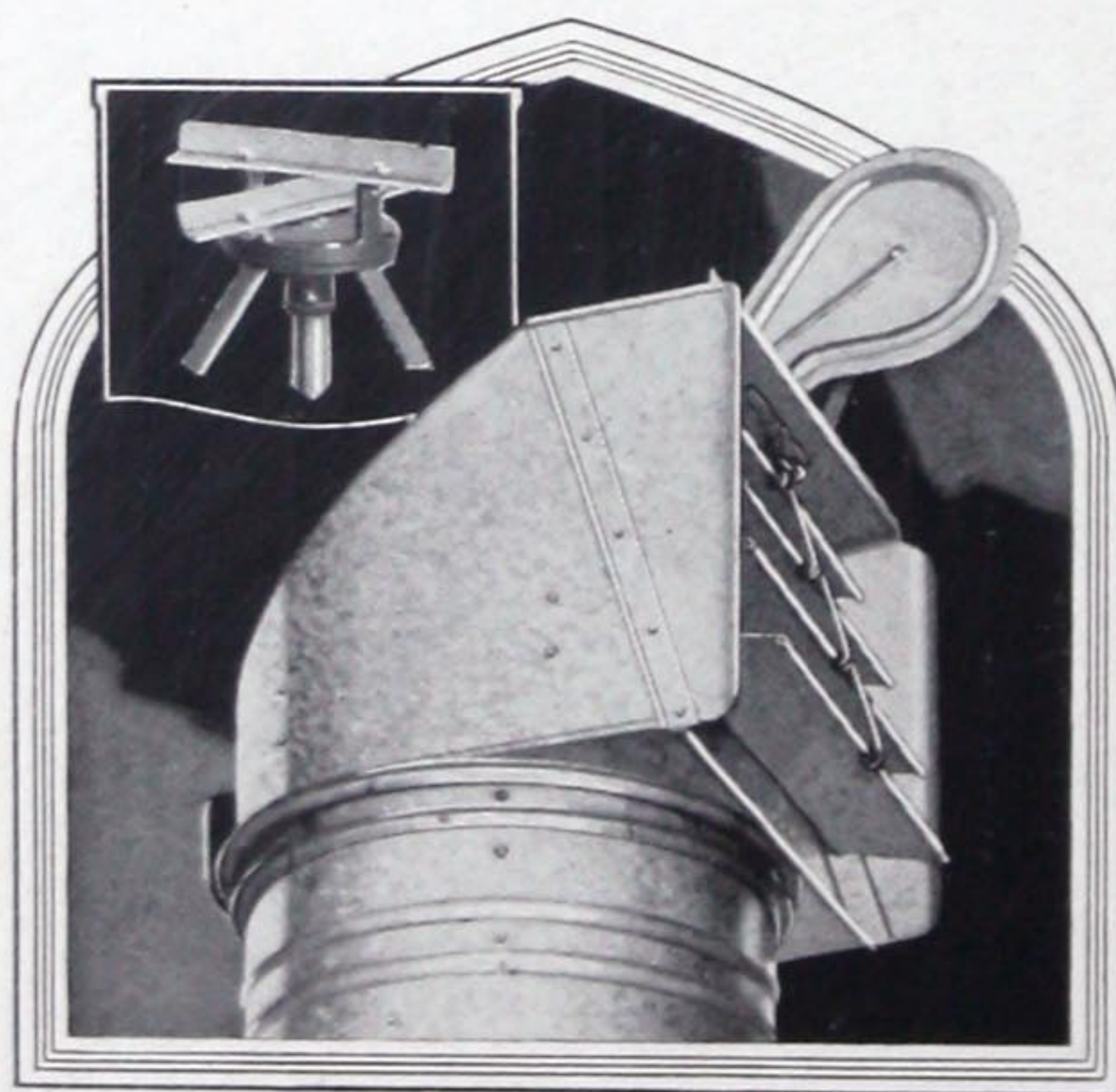
WHERE a wall board lining is desired for Swartwout Metal Buildings, spacers are furnished which are locked in the standard joints while the building is being erected. To these spacers, the wall board can be nailed. This gives a dead air space between the walls which acts as a buffer between the inside and outside temperature. The drawings will make this clear.

Swartwout Ventilators

WHERE desired, Swartwout Metal Buildings can be equipped with Swartwout Ball Bearing Ventilators.

These ventilators provide perfect ventilation. The wind does the work causing a continuous flow of air to be forced up and out. The Swartwout always faces away from the wind. Even if the air currents change rapidly the non-corrosive ball bearings take care of that and enable the ventilator to change its position with the merest zephyr and to do it quietly. This principle

creates a continual suction as the breezes go by. Consequently, there is a constant flow of air with no possibility of back draughts or return currents.



Swartwout ventilators are storm and dust proof and built of special rust-resisting material over a sturdy frame of angle iron. They will last as long as the building where they are installed.

